



## ***Manual Chromogenic Multiplex IHC Kit***

### **MATERIAL SAFETY DATA SHEET**

#### **Section 1: Identification of the substance/mixture and of the company/undertaking**

##### **1.1: Product Identifier**

**Product Name:**

**Manual Chromogenic Multiplex IHC Kit**

**Catalog No.:**

**CP01M-010**

**CP02M-010**

**CP03M-010**

**Kit Component:**

**Conjugated Antibody and other biomolecules**

##### **1.2: Product Uses**

**For Research Use Only. Not for use in diagnostic products.**

##### **1.3: Company/undertaking Identification**

Cell IDx, Inc.

6167 Cornerstone Court E, Ste 102

San Diego, CA 92121

858.452.5800

#### **Section 2: Hazardous Identification**

##### **2.1: Classification of the substance or material**

GHS-US classification

##### **2.2: Label Elements**

GHS-US labeling

No label applicable

##### **2.3: Other Hazards**

No additional information available

##### **2.4: Principal Routes of Exposure/Potential Health Effects**

May cause eye irritation with susceptible persons.

#### **Section 3: Composition/information on ingredients**

|             |                 |       |
|-------------|-----------------|-------|
| Proclin 150 | CAS# 55965-84-9 | <0.1% |
|-------------|-----------------|-------|

This product contains no substances which at their given concentration are considered to be hazardous to health.

#### **Section 4: First Aid Measures**

##### **Skin contact**

Rinse cautiously with water for several minutes. Immediate medical attention is not required.

##### **Eye contact**

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

##### **Ingestion**

Not expected to present a significant ingestion hazard under anticipated conditions of normal use. If you feel unwell, seek medical advice.



|  |  |
|--|--|
| <b>Inhalation</b>  | Not expected to be an inhalation hazard under anticipated conditions of normal use of this material. Consult a physician if necessary. |
| <b>Most important symptoms and effects, both acute and delayed</b> | Not Applicable   |
| <b>Notes to Physician</b>  | Treat symptomatically.   |

### **Section 5: Firefighting measures**

|  |   |
|--|---|
| <b>Suitable extinguishing media</b>                  | Water spray. Carbon dioxide (CO <sub>2</sub> ). Foam. Dry chemical. |
| <b>Special protective equipment for firefighters</b> | Standard procedure for chemical fires.                              |
| <b>Specific hazards arising from the chemical</b>    | Not known   |

### **Section 6: Accidental release measures**

|                                  |   |
|----------------------------------|---|
| <b>Personal precautions</b>      | Always wear recommended Personal Protective Equipment. Use personal protection equipment. |
| <b>Methods for cleaning up</b>   | Soak up with inert absorbent material.  |
| <b>Environmental precautions</b> | No special environmental precautions required   |

### **Section 7: Handling and Storage**

|                 |  |
|-----------------|--|
| <b>Handling</b> | Always wear recommended Personal Protective Equipment. No special handling advice are necessary. |
| <b>Storage</b>  | Keep in a dry, cool and well-ventilated place  |

### **Section 8: Exposure controls/personal protection**

**8.1. Control parameters**  
No additional information available.

|                                   |  |
|-----------------------------------|--|
| <b>8.2. Exposure controls</b>     |  |
| Appropriate engineering controls: | Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, etc.) below recommended exposure limits.   |
| Hand protection:                  | Wear suitable gloves.  |
| Eye protection:                   | Safety glasses or goggles are recommended when handling product.   |
| Skin and body protection:         | Wear suitable protective clothing.   |
| Respiratory protection:           | Not normally needed. In case of insufficient ventilation wear suitable respiratory equipment.  |
| Environmental exposure controls:  | Maintain levels below Community environmental protection thresholds.   |
| Other information:                | Do not eat, smoke or drink where material is handled, processed or stored. Wash hands carefully before eating or smoking. Handle according to established industrial hygiene and safety practices. |

### **Section 9: Physical and chemical properties**

#### **9.1. Information on basic physical and chemical properties**

|                  |              |
|------------------|--------------|
| Physical state:  | Liquid       |
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|   |                   |
|---|-------------------|
| Appearance:                                 | Clear             |
| Color:                                      | Colorless         |
| Odor:                                       | No data available |
| Odor threshold:                             | No data available |
| pH:   | No data available |
| Melting point:                              | No data available |
| Freezing point:                             | No data available |
| Boiling point:                              | No data available |
| Flash point:                                | No data available |
| Relative evaporation rate (butylacetate=1): | No data available |
| Flammability (solid, gas):                  | Not flammable     |
| Explosive limits:                           | No data available |
| Explosive properties:                       | No data available |
| Oxidizing properties:                       | No data available |
| Vapor pressure:                             | No data available |
| Relative density:                           | No data available |
| Relative vapor density at 20 °C:            | No data available |
| Solubility:                                 | No data available |
| Partition coefficient: n-octanol/water:     | No data available |
| Log Kow:                                    | No data available |
| Auto-ignition temperature:                  | No data available |
| Decomposition temperature:                  | No data available |
| Viscosity:                                  | No data available |
| Viscosity, kinematic:                       | No data available |
| Viscosity, dynamic:                         | No data available |

## Section 10: Stability and reactivity

|   |   |
|---|---|
| <b>Stability</b>                          | Stable under normal conditions.                             |
| <b>Materials to avoid</b>                 | No dangerous reaction known under conditions of normal use. |
| <b>Possibility of hazardous reactions</b> | Hazardous reaction has not been reported                    |
| <b>Hazardous decomposition Products</b>   | None under normal use conditions.                           |
| <b>Polymerization</b>                     | Hazardous polymerization does not occur.                    |
| <b>Conditions to avoid</b>                | None under normal processing                                |

## Section 11: Toxicological information

|                                     |  |
|-------------------------------------|--|
| <b>Acute Toxicity</b>               | No toxicology information is available.            |
| <b>Principle Routes of Exposure</b> |  |
| <b>Potential Health Effects</b>     |  |
| Eyes                                | May cause eye irritation with susceptible persons. |
| Skin                                | May cause skin irritation in susceptible persons.  |
| Inhalation                          | May be harmful by inhalation.                      |
| Ingestion                           | May be harmful if swallowed.                       |
| <b>Carcinogenic effects</b>         | None.  |
| <b>Mutagenic effects</b>            | None.  |
| <b>Reproductive toxicity</b>        | None.  |
| <b>Sensitization</b>                | None.  |

## Section 12: Ecological information

**Ecotoxicity**

Contains no substances known to be hazardous to the environment or not degradable in wastewater treatment plants.

**Mobility**

No information available.

**Biodegradation**

Inherently biodegradable.

**Bioaccumulation**

Material does not bioaccumulate.

**Section 13: Disposal considerations****13.1 Waste treatment  
Recommendations**

This material must be disposed of in accordance with all local, state, provincial and federal regulations. The generation of waste should be avoided or minimized wherever possible.

**Section 14: Transport information**

Department of Transportation (DOT)

In accordance with DOT

Not regulated for transport.

Other information

No supplementary information available

Special transport precautions

No not handle until all safety precautions have been read and understood.

**Section 15: Regulatory information**

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory.

**Section 16: Other information**

Other information:

None.

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## MATERIAL SAFETY DATA SHEET

### SECTION 1: IDENTIFICATION OF THE MIXTURE AND OF THE COMPANY

**Product Name:** Manual Chromogenic Multiplex IHC Kit  
**Catalog No.:** CP01M-010  
CP02M-010  
CP03M-010  
**Kit Component:** HRP-Yellow Chromogen (50X)

#### 1.2 Relevant identified uses of the substance or mixture and uses advised against

**Recommended use:** Immunohistochemistry (IHC)

#### 1.3 Details of the supplier of the safety data sheet

**MANUFACTURER** EMAIL ADDRESS:  
Cell IDx, Inc. support@cellidx.com  
6197 Cornerstone Court E, Ste 102  
San Diego, CA 92121

#### 1.4 Emergency telephone number

9 am-5 pm Pacific time, M-F 858.452.5800

### SECTION 2: HAZARDS IDENTIFICATION

#### 2.1 Classification of the mixture

Classification (EC 1272/2008)

Physical and Chemical Hazards Not classified

Human health

Muta. 2 - H341;Carc. 1B - H350

Environment

Not classified.

Classification (1999/45/EEC)

Carc. Cat. 2;R45. Muta Cat. 3;R68.

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

#### 2.2 Label elements

**Contains** BIPHENYL-3,3',4,4'-TETRAYL-TETRAAMINE  
**Label in Accordance With (EC) No. 1272/2008**



**Signal Word**

Danger

**Hazard Statements**

H341

Suspected of causing genetic defects.

H35

May cause cancer.

**Precautionary Statements**

P202

Do not handle until all safety precautions have been read and understood.

P280

Wear protective clothing, gloves, eye and face protection.

P308+313

IF exposed or concerned: Get medical advice/attention.

#### 2.3 Other information

None

### SECTION 3: COMPOSITION/ INFORMATION ON INGREDIENTS

BIPHENYL-3,3',4,4'-TETRAYL-TETRAAMINE <5%

CAS-No.: 91-95-2

EC No.: 202-110-6

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Classification (EC 1272/2008)  
Muta. 2 - H341  
Carc. 1B - H350

Classification (67/548/EEC)  
Muta. Cat. 3;R68  
Carc. Cat. 2;R45

ETHYLENE GLYCOL  
CAS-No.: 107-21-1  
Classification (EC 1272/2008)  
Not classified

<80%  
EC No.: 203-473-3  
Classification (67/548/EEC)  
[Xn] R22

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

## **SECTION 4: FIRST AID MEASURES**

### **4.1. Description of first aid measures**

#### **If inhaled**

In case of inhalation of spray mist: Move person into fresh air and keep at rest. Get medical attention if any discomfort continues. If breathing stops, provide artificial respiration. Get medical attention immediately!

#### **If ingested**

Immediately rinse mouth and drink plenty of water (200-300 ml). DO NOT INDUCE VOMITING! NEVER MAKE AN UNCONSCIOUS PERSON VOMIT OR DRINK FLUIDS! Get medical attention.

#### **In case of skin contact**

Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention promptly if symptoms occur after washing.

#### **In case of eye contact**

Promptly wash eyes with plenty of water while lifting the eye lids. Make sure to remove any contact lenses from the eyes before rinsing. Continue to rinse for at least 15 minutes. Obtain medical attention and bring these instructions.

### **4.2. Most important symptoms and effects, both acute and delayed**

#### **Inhalation**

May cause coughing or mild irritation.

#### **Ingestion**

May cause discomfort if swallowed.

#### **Skin contact**

Prolonged skin contact may cause redness and irritation.

#### **Eye contact**

May cause temporary eye irritation.

### **4.3. Indication of any immediate medical attention and special treatment needed**

No specific first aid measures noted. Treat Symptomatically.

## **SECTION 5: FIREFIGHTING MEASURES**

### **5.1. Extinguishing media**

Fire can be extinguished using Water spray. Foam. Powder.

### **5.2. Special hazards arising from the substance or mixture**

The product is non-combustible. If heated, irritating vapors may be formed. Hydrogen chloride (HCl). When heated and in case of fire, very toxic nitrogen oxides are formed.

### **5.3. Advice for firefighters**

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

## **SECTION 6: ACCIDENTAL RELEASE MEASURES**



### **6.1. Personal precautions, protective equipment and emergency procedures**

Stop leak, if possible, without any risk. Remove or isolate all sources of ignition. Wear protective clothing as described in Section 8 of this safety data sheet.

### **6.2. Environmental precautions**

Do not allow to enter drains, sewers or watercourses.

### **6.3. Methods and material for containment and cleaning up**

Absorb spillage with suitable absorbent material. Collect spillage in containers, seal securely and deliver for disposal according to local regulations. Flush with plenty of water to clean spillage area. Do not contaminate water sources or sewer.

### **6.4. Reference to other sections**

Wear protective clothing as described in Section 8 of this safety data sheet. For waste disposal, see section 13.

## **SECTION 7: HANDLING AND STORAGE**

### **7.1. Precautions for safe handling**

Provide adequate ventilation, including appropriate local extraction, to ensure that the defined occupational exposure limit is not exceeded. Avoid inhalation of vapors/spray and contact with skin and eyes. Wash contaminated clothing before reuse.

### **7.2. Conditions for safe storage, including any incompatibilities**

Store in tightly closed original container in a dry, cool and well-ventilated place. Refer to product label.

Storage Class:

Refer to product datasheet.

### **7.3. Specific end use(s)**

The identified uses for this product are detailed in Section 1.2.

## **SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

### **8.1. Control parameters**

Name:

ETHYLENE GLYCOL

Workplace Exposure Limit

UK - 8 hour TWA: 60 mg/m<sup>3</sup>

UK - 15 min. STEL: 125 mg/m<sup>3</sup>

### **8.2. Exposure controls**

#### **Protective equipment**

Impermeable gloves and safety glasses

#### **Process conditions**

Provide eyewash station.

#### **Engineering measures**

Provide adequate ventilation. Observe occupational exposure limits and minimize the risk of inhalation of spray.

#### **Respiratory equipment**

No specific recommendation made, but respiratory protection must be used if the general level exceeds the recommended occupational exposure limit.

#### **Hand protection**

Use suitable protective gloves if risk of skin contact. The most suitable glove must be chosen in consultation with the glove's supplier, who can inform about the breakthrough time of the glove material. Nitrile gloves are recommended but be aware that the liquid may penetrate the gloves. Frequent change is advisable.

#### **Eye protection**

If risk of splashing, wear safety goggles or face shield.

#### **Other Protection**



Wear appropriate clothing to prevent any possibility of skin contact.

#### **Hygiene measures**

DO NOT SMOKE IN WORK AREA! Wash hands at the end of each work shift and before eating, smoking and using the toilet. Wash promptly if skin becomes wet or contaminated. Promptly remove any clothing that becomes contaminated. Use appropriate skin cream to prevent drying of skin. When using do not eat, drink or smoke.

#### **Skin protection**

Wear apron or protective clothing in case of contact. Wash contaminated clothing before reuse.

## **SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

### **9.1. Information on basic physical and chemical properties**

|  |   |
|--|---|
| Appearance                                     | Form: Liquid<br>Color: Light brown/purple |
| Odor   | Odorless                                  |
| Solubility                                     | Soluble in water.                         |
| Initial boiling point and boiling range        | <100 @ 760 mm Hg                          |
| Melting point (°C)                             | ~ 0°C                                     |
| Relative density                               | ~1 g/ml                                   |
| Vapor density (air=1)                          | No Data Available                         |
| Vapor pressure                                 | No Data Available                         |
| Evaporation rate                               | No Data Available                         |
| Viscosity                                      | No Data Available                         |
| Solubility Value (G/100G H <sub>2</sub> O@20°) | No Data Available                         |
| Decomposition temperature (°C)                 | No Data Available                         |
| Flash point                                    | No Data Available                         |
| Auto Ignition Temperature (°C)                 | No Data Available                         |
| Flammability Limit - Lower(%)                  | No Data Available                         |
| Flammability Limit - Upper(%)                  | No Data Available                         |
| Partition Coefficient (N-Octanol/Water)        | No Data Available                         |
| Explosive properties                           | No Data Available                         |
| Oxidizing properties,                          | No Data Available                         |

### **9.2. Other information**

None

## **SECTION 10: STABILITY AND REACTIVITY**

### **10.1. Reactivity**

There are no known reactivity hazards associated with this product.

### **10.2. Chemical stability**

Stable under normal temperature conditions.

### **10.3. Possibility of hazardous reactions**

Hazardous Polymerization Will not polymerize

### **10.4. Conditions to avoid**

Avoid exposure to high temperatures or direct sunlight.

### **10.5. Incompatible materials**

Materials to Avoid Strong alkalis





## 10.6. Hazardous decomposition products

Oxides of: Carbon, Nitrogen

## SECTION 11: TOXICOLOGICAL INFORMATION

### 11.1. Information on toxicological effects

Toxicological information No information available

Acute toxicity:

Acute Toxicity (Oral LD50)

Mouse 1834 mg/kg

Skin Corrosion/Irritation:

Human Skin Model Test

Not determined

Serious eye damage/irritation:

Not determined

Respiratory sensitization

Not determined

Skin sensitization

Not determined

Germ cell mutagenicity (InVitro)

Not determined

Carcinogenicity

Not determined

Reproductive Toxicity – Fertility

Not determined

Specific target organ toxicity - single exposure:

STOT - Single exposure

Not determined

Specific target organ toxicity – repeated exposure:

STOT - Repeated exposure

Not determined

Aspiration hazard:

Viscosity

Not determined

Inhalation

In high concentrations, vapors may irritate throat and respiratory system and cause coughing.

Ingestion

Harmful if swallowed.

Skin contact

Liquid may irritate skin. Not a skin sensitizer.

Eye contact

Spray and vapor in the eyes may cause irritation and smarting.

Health Warnings

Known or suspected mutagen. Known or suspected carcinogen for humans.

Route of entry

Ingestion. Skin and/or eye contact.

Toxicological information on ingredients.

BIPHENYL-3,3',4,4'-TETRAYL-TETRAAMINE (CAS: 91-95-2)

## SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity There are no data on the ecotoxicity of this product.

### 12.1. Toxicity

Acute Toxicity – Fish

Not determined

### 12.2. Persistence and degradability

Degradability

There are no data on the degradability of this product. This product is expected to be not readily biodegradable.

### 12.3. Bio accumulative potential

Bio accumulative potential

No data available on bioaccumulation. The product does not contain any substances expected to be bioaccumulating.

Partition coefficient

Not determined

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#### 12.4. Mobility in soil

Mobility: The product is soluble in water.

#### 12.5. Results of PBT and vPvB assessment

Not expected to be PBT or vPvB

#### 12.6. Other adverse effects

Not determined

### SECTION 13: DISPOSAL CONSIDERATIONS

General information

Waste is classified as hazardous waste. Disposal to licensed waste disposal site in accordance with the local Waste Disposal Authority.

#### 13.1. Waste treatment methods

Dispose of waste and residues in accordance with local authority requirements.

### SECTION 14: TRANSPORTATION INFORMATION

General

The product is not covered by international regulation on the transport of dangerous goods (IMDG, IATA, ADR/RID)

|                      |                |
|----------------------|----------------|
| Road Transport Notes | Not classified |
| Rail Transport Notes | Not classified |
| Sea Transport Notes  | Not classified |
| Air Transport Notes  | Not classified |

#### 14.1. UN number

Not applicable.

#### 14.2. UN proper shipping name

Not applicable.

#### 14.3. Transport hazard class(es)

Not applicable.

#### 14.4. Packing group

Not applicable.

#### 14.5. Environmental hazards

Environmentally Hazardous Substance/Marine Pollutant No.

#### 14.6. Special precautions for user

Not applicable.

#### 14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable.

### SECTION 15: REGULATORY INFORMATION

#### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Approved Code Of Practice

Classification and Labelling of Substances and Preparations Dangerous for Supply. Safety Data Sheets for Substances and Preparations.

Guidance Notes

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Workplace Exposure Limits EH40.

#### EU Legislation

Regulation (EU) No 453/2010 of 20 May 2010 Annex II and Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 with amendments. Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments.

#### 15.2. Chemical Safety Assessment

No chemical safety assessment has been carried out.

### SECTION 16: OTHER INFORMATION

|                           |  |
|---------------------------|--|
| General information       | Only trained personnel should use this material. |
| Risk Phrases In Full      |  |
| R22                       | Harmful if swallowed                             |
| R45                       | May cause cancer.                                |
| R68                       | Possible risk of irreversible effects.           |
| Hazard Statements In Full |  |
| H350                      | May cause cancer.                                |
| H341                      | Suspected of causing genetic defects.            |

**Disclaimer:** This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability, or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.



## MATERIAL SAFETY DATA SHEET

### SECTION 1: IDENTIFICATION OF THE MIXTURE AND OF THE COMPANY

#### 1.1. Product identifier

**Product Name:** Manual Chromogenic Multiplex IHC Kit  
**Catalog No.:** CP01M-010  
CP02M-010  
CP03M-010  
**Kit Component:** HRP-Yellow Buffer (1X)

**1.2. Relevant identified uses of the substance or mixture and uses advised against**  
Recommended use: Immunohistochemistry (IHC)

#### 1.3. Details of the supplier of the safety data sheet

**MANUFACTURER** EMAIL ADDRESS:  
Cell IDx, Inc. info@cellidx.com  
6197 Cornerstone Court E, Ste 102  
San Diego, CA 92121

**1.4. Emergency telephone number**  
9 am-5 pm PST, M-F 858.452.5800

### SECTION 2: HAZARDS IDENTIFICATION

#### 2.1. Classification of the mixture

##### GHS Classification in accordance with EC 1272/2008

Physical and Chemical Hazards Not classified  
Human health Not classified  
Environment Not classified

##### GHS Classification in accordance with 1999/45/EEC

Not classified

#### 2.2. GHS label elements

##### Label in accordance with (EC) No. 1272/2008

Not classified

##### Supplemental Label information (EU)

EUH210 Safety data sheet available on request

#### 2.3. Other hazards which do not result in classification

None

### SECTION 3: COMPOSITION/ INFORMATION ON INGREDIENTS

| Description                | CAS#      | EINECS#   | %   |
|----------------------------|-----------|-----------|-----|
| Hydrogen Peroxide Solution | 7722-84-1 | 231-765-0 | <1% |

| Classification (EC 1272/2008) | Classification (67/548/EEC) |
|-------------------------------|-----------------------------|
| Ox. Liq. 1 - H271             | R5                          |
| Acute Tox. 4 - H302           | O;R8                        |
| Acute Tox. 4 - H332           | C;R35                       |
| Skin Corr. 1A - H314          | Xn;R20/22                   |
| STOT Single 3 H335            |                             |



Citric Acid 770-92-9 201-069-1 <1%

Classification (EC 1272/2008) Classification (67/548/EEC)  
Eye Irr. 2 – H319 Xi;R36

The Full Test for all R-Phrases and Hazard Statements are Displayed in Section 16.

## **SECTION 4: FIRST AID MEASURES**

### **4.1. Description of first aid measures**

#### **General Advice**

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

#### **If inhaled**

If breathed in, move person into fresh air and keep at rest. Get medical attention if any discomfort continues. If breathing stops, provide artificial respiration. Get medical attention immediately!

#### **In case of skin contact**

Wash off with soap and plenty of water. Consult a physician if symptoms occur after washing.

#### **In case of eye contact**

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. Continue rinsing eyes during transport to hospital.

#### **If swallowed**

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician if any discomfort continues.

### **4.2. Most important symptoms and effects, both acute and delayed**

#### **Inhalation**

May cause coughing or mild irritation

#### **Ingestion**

May cause discomfort if swallowed

#### **Skin Contact**

Prolonged skin contact may cause redness and irritation

#### **Eye Contact**

May cause temporary eye irritation

### **4.3 Indication of immediate medical attention and special treatment needed, if necessary**

No specific first aid measures noted.

## **SECTION 5: FIREFIGHTING MEASURES**

### **5.1. Extinguishing media**

This product is not flammable. Use fire-extinguishing media appropriate for surrounding materials

### **5.2. Special hazards arising from the substance or mixture**

None under normal condition.

### **5.3. Special advice for firefighters**

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

## **SECTION 6: ACCIDENTAL RELEASE MEASURES**

### **6.1. Personal precautions, protective equipment and emergency procedures**

Avoid inhalation of spray mist and contact with skin and eyes. Use protective gloves, goggles and suitable protective clothing. For personal protection, see section 8.



## **6.2. Environmental precautions**

Do not allow to enter drains, sewers or watercourses.

## **6.3. Methods and material for containment and cleaning up**

Stop leak if possible without risk. Absorb spillage with suitable absorbent material. Flush with plenty of water to clean spillage area. Do not contaminate water sources or sewer.

## **6.4. Reference to other sections**

Wear protective clothing as described in Section 8 of this safety data sheet

# **SECTION 7: HANDLING AND STORAGE**

## **7.1. Precautions for safe handling**

Avoid spilling, skin and eye contact. Good personal hygiene is necessary. Wash hands and contaminated areas with water and soap before leaving the work site.

## **7.2. Conditions for safe storage, including any incompatibilities**

Keep in original container. Store at specified temperature. Refer to product label.

Storage Class: Refer to product datasheet.

## **7.3. Specific end use(s)**

The identified uses for this product are detailed in Section 1.2

# **SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

## **8.1 Control parameters**

### **Components with workplace control parameters**

|                          |  |
|--------------------------|--|
| Name:                    | HYDROGEN PEROXIDE SOLUTION               |
| Workplace Exposure Limit | UK - 8 hour TWA: 1.4 mg/m <sup>3</sup>   |
|                          | UK - 15 min. STEL: 2.8 mg/m <sup>3</sup> |

## **8.2. Exposure controls**

### **Protective equipment**

Impermeable gloves and safety glasses

### **Process conditions**

Provide eyewash station.

### **Engineering measures**

Provide adequate ventilation. Observe occupational exposure limits and minimize the risk of inhalation of spray.

### **Respiratory equipment**

No specific recommendation made, but respiratory protection must be used if the general level exceeds the recommended occupational exposure limit.

### **Hand protection**

Use suitable protective gloves if risk of skin contact. The most suitable glove must be chosen in consultation with the gloves supplier, who can inform about the breakthrough time of the glove material. Nitrile gloves are recommended, but be aware that the liquid may penetrate the gloves. Frequent change is advisable.

### **Eye protection**

If risk of splashing, wear safety goggles or face shield.

### **Other Protection**

Wear appropriate clothing to prevent any possibility of skin contact.

### **Hygiene measures**



DO NOT SMOKE IN WORK AREA! Wash hands at the end of each work shift and before eating, smoking and using the toilet. Wash promptly if skin becomes wet or contaminated. Promptly remove any clothing that becomes contaminated. Use appropriate skin cream to prevent drying of skin. When using do not eat, drink or smoke.

#### **Skin protection**

Wear apron or protective clothing in case of contact. Wash contaminated clothing before reuse.

## **SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

### **9.1. Information on basic physical and chemical properties**

|   |  |
|---|--|
| Appearance                                      | Form: Liquid                             |
|   | Color: Colorless                         |
| Odor  | Odorless                                 |
| Solubility                                      | Soluble in water                         |
| Initial boiling point and boiling range         | <100 @ 760 mm Hg                         |
| Melting point (°C)                              | ~ 0°C                                    |
| Relative density                                | ~1 g/ml                                  |
| Vapor density (air=1)                           | Not determined                           |
| Vapor pressure                                  | Not determined                           |
| Evaporation rate                                | Not determined                           |
| Viscosity                                       | Not determined                           |
| Solubility Value (G/100G H <sub>2</sub> O@20°C) | Not determined                           |
| Decomposition temperature (°C)                  | Not determined                           |
| Flash point                                     | Not applicable                           |
| Auto Ignition Temperature (°C)                  | Not determined                           |
| Flammability Limit - Lower(%)                   | Not applicable                           |
| Flammability Limit - Upper(%)                   | Not applicable                           |
| Partition Coefficient<br>(N-Octanol/Water)      | Not determined                           |
| Explosive properties                            | Not applicable                           |
| Oxidizing properties                            | Does not meet the criteria for oxidizing |

### **9.2. Other information**

None

## **SECTION 10: STABILITY AND REACTIVITY**

### **10.1. Reactivity**

No data available

### **10.2. Chemical stability**

Stable under normal temperature conditions

### **10.3. Possibility of hazardous reactions**

No data available

### **10.4. Conditions to avoid**

Avoid exposure to high temperatures or direct sunlight

### **10.5. Incompatible materials**

|                    |                |
|--------------------|----------------|
| Materials To Avoid | Strong alkalis |
|--------------------|----------------|

### **10.6. Hazardous decomposition products**

None under normal conditions



## **SECTION 11: TOXICOLOGICAL INFORMATION**

### **11.1. Information on toxicological effects**

|  |                          |
|--|--------------------------|
| Toxicological information  | No information available |
| Acute Toxicity (Oral LD50)   | Not determined           |
| Skin Corrosion/Irritation  |                          |
| Human Skin Model   | Test Not determined      |
| Serious eye damage/irritation  | Not determined           |
| Respiratory sensitization  | Not determined           |
| Skin sensitization   | Not determined           |
| Germ cell mutagenicity (In Vitro)  | Not determined           |
| Carcinogenicity  | Not determined           |
| Reproductive Toxicity – Fertility  | Not determined           |
| Specific target organ toxicity   |                          |
| Single exposure  | Not determined           |
| Repeated exposure  | Not determined           |
| Aspiration hazard  | Not determined           |
| Inhalation   |                          |
| In high concentrations, vapours may irritate throat and respiratory system and cause coughing. |                          |
| Ingestion  |                          |
| May cause discomfort if swallowed.   |                          |
| Skin contact   |                          |
| Liquid may irritate skin.  |                          |
| Eye contact  |                          |
| Spray and vapor in the eyes may cause irritation and smarting.                                 |                          |
| Health Warnings  |                          |
| Known or suspected mutagen. Known or suspected carcinogen for humans.                          |                          |
| Route of entry   |                          |
| Ingestion.   |                          |
| Skin and/or eye contact.   |                          |

## **SECTION 12: ECOLOGICAL INFORMATION**

### **12.1. Toxicity**

Not considered toxic to fish

### **12.2. Persistence and degradability**

This product is expected to be biodegradable

### **12.3. Bio accumulative potential**

This product does not contain any substances expected to be bioaccumulating

### **12.4. Mobility in soil**

This product is soluble in water

### **12.5. Results of PBT and vPvB assessment**

No information available

### **12.6. Other adverse effects**

Not determined

## **SECTION 13: DISPOSAL CONSIDERATIONS**

### **General information**

When handling waste, consideration should be made to the safety precautions applying to handling of the product





### 13.1. Waste treatment methods

Dispose of waste and residues in accordance with local authority requirements.

## SECTION 14: TRANSPORTATION INFORMATION

### General

The product is not covered by international regulation on the transport of dangerous goods (MDG, IATA, ADR/RID)

|                           |                |
|---------------------------|----------------|
| Road Transport Notes      | Not Classified |
| Rail Transportation Notes | Not Classified |
| Sea Transport Notes       | Not Classified |
| Air Transport Notes       | Not Classified |

### 14.1. UN number/UN Proper Shipping Name

Not applicable.

### 14.2. DOT (US)

Not dangerous good

### 14.3. Transport hazard class(es)

Not dangerous goods.

### 14.4. Packing group

Not applicable

### 14.5. Environmental hazards

Environmentally Hazardous Substance/Marine Pollutants  
No

### 14.6. Special precautions for user

None

### 14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable

## SECTION 15: REGULATORY INFORMATION

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Approved Code Of Practice

Classification and Labelling of Substances and Preparations Dangerous for Supply. Safety Data Sheets for Substances and Preparations.

Guidance Notes

Workplace Exposure Limits EH40.

EU Legislation

Regulation (EU) No 453/2010 of 20 May 2010 Annex II and Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 with amendments. Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments.



## 15.2. Chemical Safety Assessment

No chemical safety assessment has been carried out.

## SECTION 16: OTHER INFORMATION

General information

Only trained personnel should use this material.

### Risk Phrases In Full

R35

Causes severe burns

R8

Contact with combustible material may cause fire

R20/22

Harmful by inhalation and if swallowed

R5

Heating may cause an explosion

R36

Irritating to eyes

R37

Irritating to respiratory system

### Hazard Statements In Full

H271

May cause fire or explosion; strong oxidizer

H302

Harmful if swallowed

H314

Causes severe skin burns and eye damage

H319

Causes serious eye irritation

H332

Harmful if inhaled

H335

May cause respiratory irritation.

**Disclaimer:** This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.



# Material Safety Data Sheet

## SECTION 1: IDENTIFICATION OF THE MIXTURE AND OF THE COMPANY

### 1.1. Product identifier

**Product Name:** Manual Chromogenic Multiplex IHC Kit  
**Catalog No.:** CP01M-010  
CP02M-010  
CP03M-010  
**Kit Component:** Red AP Chromogen (50x)

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

**Recommended use:** Immunohistochemistry (IHC)

### 1.3. Details of the supplier of the safety data sheet

**MANUFACTURER** EMAIL ADDRESS:  
Cell IDx, Inc. info@cellidx.com  
6197 Cornerstone Court E, Ste 102  
San Diego, CA 92121

### 1.4. Emergency telephone number

9 am-5 pm PST, M-F 858.452.5800

## SECTION 2: HAZARDS IDENTIFICATION

### 2.1 Classification of the mixture

OSHA/HCS status Skin irritation (Category 2), H315  
Eye irritation (Category 2A), H319

### 2.2 Label elements



**Signal Word**

Warning

**Hazard Statements**

H315 Causes skin irritation  
H319 Causes eye irritation  
H335 May cause respiratory irritation

**Precautionary Statements**

P202 Do not handle until all safety precautions have been read and understood.  
P280 Wear protective clothing, gloves, eye and face protection.  
P308+313 IF exposed or concerned: Get medical advice/attention.  
P234 Keep only in original container.  
P264 Wash hands thoroughly after handling.  
P390 Absorb spillage to prevent material damage.  
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P337 + P313 If eye irritation persists: Get medical attention.

**Storage**

P406 Store in a corrosion resistant container with a resistant inner liner.

**Disposal**

P501 Dispose of in an approved waste disposal plant

### 2.3 Other information

None



### SECTION 3: COMPOSITION/ INFORMATION ON INGREDIENTS

| Component                            | CAS number | EC number | %        |
|--------------------------------------|------------|-----------|----------|
| Naphthol-AS-MX-phosphate sodium salt | 1596-56-1  | 216-480-1 | < = 100% |

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

### SECTION 4: FIRST AID MEASURES

#### 4.1. Potential acute health effects

|              |   |
|--------------|---|
| Eye contact  | Causes eye irritation.                            |
| Inhalation   | No known significant effects or critical hazards. |
| Skin contact | No known significant effects or critical hazards. |
| Ingestion    | No known significant effects or critical hazards. |

#### 4.2. Over-exposure signs/symptoms

|              |  |
|--------------|--|
| Eye contact  | Adverse symptoms may include the following:<br>irritation<br>watering<br>redness |
| Inhalation   | No specific data   |
| Skin contact | No specific data   |
| Ingestion    | No specific data   |

#### 4.3 Indication of immediate medical attention and special treatment needed, if necessary

##### Notes to physician

In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

##### Specific treatments

|                   |   |
|-------------------|---|
| If inhaled        | Move person to fresh air. Give artificial respiration if not breathing.             |
| Consult physician |   |
| If skin contact   | Wash generously with soap and water. Consult physician.                             |
| If eye contact    | Rinse with water for at least 15 minutes. Consult physician                         |
| If swallowed      | NEVER give anything to unconscious person. Rise mouth with water. Consult physician |

##### Protection of first-aiders

No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

### SECTION 5: FIREFIGHTING MEASURES

#### 5.1. Extinguishing media

Fire can be extinguished using: Water spray. Foam. Powder.

#### 5.2. Special hazards arising from the substance or mixture

Not combustible

Decomposition products may include



Carbon oxides, nitrogen oxides, phosphorus oxides.

### **5.3. Advice for firefighters**

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Wear appropriate protective equipment and self-containing breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode

## **SECTION 6: ACCIDENTAL RELEASE MEASURES**

### **6.1. Personal precautions, protective equipment and emergency procedures**

Non-emergency personnel

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep 4-unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist.

Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

Emergency responders

If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

### **6.2. Environmental precautions**

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

### **6.3. Methods and material for containment and cleaning up**

Clean without creating dust. Sweep up and shovel product and store in a closed container suitable for storage until disposal

## **SECTION 7: HANDLING AND STORAGE**

### **7.1. Precautions for safe handling**

Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container. Absorb spillage to prevent material damage.

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

### **7.2. Conditions for safe storage, including any incompatibilities**

Specific storage conditions, consult label

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store in a corrosion resistant container with a resistant inner liner. Keep away from metals. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

### **7.3. Specific end use(s)**



The identified uses for this product are detailed in Section 1.2.

## **SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

### **8.1. Control parameters**

#### **Components with workplace control parameters**

No substance with occupational exposure limit values

### **8.2. Exposure controls**

#### **Appropriate engineering controls**

Wash hands after use before breaks and at the end of the workday. Keep with good hygiene and safety practices.

#### **Environmental exposure controls**

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

#### **Individual protection measures**

##### **Hygiene measures**

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

##### **Eye/face protection**

Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

##### **Skin protection**

###### **Hand protection**

Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

###### **Body protection**

Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

###### **Other skin protection**

Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

###### **Respiratory protection**

Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use

## **SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

### **9.1. Information on basic physical and chemical properties**

Appearance

Form: Liquid

Color: Amber



|  |                               |
|--|-------------------------------|
| Odor   | not available                 |
| Odor threshold                               | not available                 |
| pH   | not available                 |
| Melting point                                | not available                 |
| Boiling point                                | not available                 |
| Flash point                                  | not available                 |
| Evaporation rate                             | not available                 |
| Flammability (solid, gas)                    | not available                 |
| Lower and upper explosive (flammable) limits | not available                 |
| Vapor pressure                               | not available                 |
| Vapor density                                | not available                 |
| Relative density                             | not available                 |
| Solubility                                   | Soluble in cold and hot water |
| Partition coefficient: n-octanol/water       | not available                 |
| Auto-ignition temperature                    | not available                 |
| Decomposition temperature                    | not available                 |
| Viscosity                                    | not available                 |

## 9.2. Other information

None

## SECTION 10: STABILITY AND REACTIVITY

### 10.1. Reactivity

No specific test data related to reactivity available for this product or its ingredients.

### 10.2. Chemical stability

The product is stable under recommended storage conditions

### 10.3. Possibility of hazardous reactions

No specific data

### 10.4. Conditions to avoid

No specific data

### 10.5. Incompatible materials

Strong oxidizing agents

### 10.6. Hazardous decomposition products

Under fire conditions: carbon oxides, nitrogen oxides, phosphorus oxides

## SECTION 11: TOXICOLOGICAL INFORMATION

### 11.1. Toxicological information

|  |                          |
|--|--------------------------|
| Acute toxicity                                     | No information available |
| Irritation/Corrosion                               | No information available |
| Sensitization                                      | No information available |
| Mutagenicity                                       | No information available |
| Carcinogenicity                                    | No information available |
| Reproductive toxicity                              | No information available |
| Teratogenicity                                     | No information available |
| Specific target organ toxicity (repeated exposure) | No information available |
| Aspiration hazard                                  | No information available |



### **11.2. Routes of entry and health effects**

Information on the likely routes of exposure

Routes of entry anticipated: Oral, Dermal, Inhalation.

#### **Potential acute health effects**

Eye contact

Causes eye irritation

Inhalation

May cause respiratory irritation

Skin contact

No known significant effects or critical hazards.

Ingestion

No known significant effects or critical hazards.

## **SECTION 12: ECOLOGICAL INFORMATION**

### **12.1. Toxicity**

Not available

### **12.2. Persistence and degradability**

Not available

### **12.3. Bio accumulative potential**

Not available

### **12.4. Mobility in soil**

Not available

### **12.5. Other adverse effects**

Not determined

## **SECTION 13: DISPOSAL CONSIDERATIONS**

### **13.1. Waste treatment methods**

Generation of waste should be avoided or minimized whenever possible. Dispose of product, solutions, and by-products according to the requirements of environmental protection and waste disposal legislation and any regional authority requirements. Dispose of unused product as if unopened. Waste should not be disposed of untreated into a sewage system unless fully compliant with the requirements of all authorities with jurisdiction. Recycle waste packaging whenever possible. Take care when handling emptied containers that have not been cleaned or rinsed out. Empty containers may retain some product residues. DO NOT allow spilled material and runoff to contact drains, sewers, soil, or waterways.

The information presented below only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations

## **SECTION 14: TRANSPORTATION INFORMATION**

### **14.1. DOT (US)**

Not a dangerous good

### **14.2. IMDG**

Not a dangerous good





#### **14.3. IATA**

Not a dangerous good

### **SECTION 15: REGULATORY INFORMATION**

#### **15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

No data available

#### **15.2. SARA 302/304**

No chemicals part of this material are required to be reported per SARA Title III, Section 302

#### **15.3. SARA 313**

No chemical part of this material are required to be reported per SARA Title III, Section 313

#### **15.4. SARA 311/312**

Acute Health Hazard

#### **15.5. SARA 313**

No data available

#### **15.6. State regulations**

Massachusetts

The following components are listed: None

Pennsylvania

The following components are listed: 3-(Phosphonooxy)-N-(2,4-xylyl)naphthalene-2-carboxamide (CAS 1596-56-1)

New York

The following components are listed: 3-(Phosphonooxy)-N-(2,4-xylyl)naphthalene-2-carboxamide (CAS 1596-56-1)

New Jersey

The following components are listed: None

### **SECTION 16: OTHER INFORMATION**

#### **Disclaimer**

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability, or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.



# Material Safety Data Sheet

## SECTION 1: IDENTIFICATION OF THE MIXTURE AND OF THE COMPANY

### 1.1. Product identifier

**Product Name:** Manual Chromogenic Multiplex IHC Kit  
**Catalog No.:** CP01M-010  
CP02M-010  
CP03M-010  
**Kit Component:** AP-Red Buffer (1X)

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

**Recommended use:** Immunohistochemistry (IHC)

### 1.3. Details of the supplier of the safety data sheet

**MANUFACTURER** EMAIL ADDRESS:  
Cell IDx, Inc. info@cellidx.com  
6197 Cornerstone Court E, Ste 102  
San Diego, CA 92121

### 1.4. Emergency telephone number

9 am-5 pm PST, M-F 858.452.5800

## SECTION 2: HAZARDS IDENTIFICATION

### 2.1. Classification of the mixture

| Hazard Class | Category | Category | Hazard Statements (H-Statements)   |
|--------------|----------|----------|--|
| N/A          | N/A      | N/A      | This product has been classified as non-hazardous based on the physical and/or chemical nature and/or concentration of ingredients |

### GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Skin corrosion (Category 1B), H314  
Serious eye Damage (Category 1), H318  
Reproductive toxicity (Category 1B), H360

### 2.2. Label elements

**Danger**



H-Statements N/A  
P-Statements N/A  
EUH-Statements N/A

## SECTION 3: COMPOSITION/ INFORMATION ON INGREDIENTS

### Component 1

| Name              | Identifiers                     | Classification according to CLP | Classification substances) | (for pure |
|-------------------|---------------------------------|---------------------------------|----------------------------|-----------|
| Hydrochloric Acid | EC: 231-585-7<br>CAS: 7647-01-0 | Concentration <0.5%             | N/A                        |           |

### Component 2

Issued 2/22/2022



| Name        | Identifiers                         | Classification according to CLP | Classification (for pure substances) |
|-------------|-------------------------------------|---------------------------------|--------------------------------------|
| Proclin 300 | EC: 613-167-00-5<br>CAS: 55965-84-9 | Concentration <0.1%             | R43                                  |

## **SECTION 4: FIRST AID MEASURES**

### **4.1. Description of first aid measures**

**Inhalation:** Remove to fresh air.

**Skin contact:** Wash thoroughly with soap and water.

**Eye Contact:** Flush eyes with water as a precaution.

**Ingestion:** Do not induce vomiting. Wash out mouth with water.

### **4.2. Most important symptoms and effects, both acute and delayed**

**Most important symptoms and effects, both acute and delayed**

N/A

### **4.3 Indication of immediate medical attention and special treatment needed, if necessary**

N/A

## **SECTION 5: FIREFIGHTING MEASURES**

### **5.1. Extinguishing media**

Extinguish using suitable agents

### **5.2. Special advice for firefighters**

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

## **SECTION 6: ACCIDENTAL RELEASE MEASURES**

### **6.1. Personal precautions, protective equipment and emergency procedures**

Wear protective clothing to prevent contact with eyes and skin. Ensure adequate ventilation. Collect on absorbent material and dispose of according to federal, state and local environmental regulations.

## **SECTION 7: HANDLING AND STORAGE**

### **7.1. Precautions for safe handling**

Use only with adequate ventilation. Wear eye protection and compatible chemical-resistant gloves. Handle in accordance with good industrial hygiene and safety practice.

### **7.2. Conditions for safe storage, including any incompatibilities**

Store at 2°-8°C

## **SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

### **8.1 Exposure Controls**

#### **Respiratory Controls**

Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator



### **Skin and Body Protection**

Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

### **Eye/Face Protection**

Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

### **Hygiene Measures**

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

## **SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

### **9.1. Information on basic physical and chemical properties**

|                    |        |
|--------------------|--------|
| Appearance:        | Liquid |
| Odor:              | None   |
| pH:                | 8.6    |
| Boiling point:     | N/A    |
| Melting point:     | N/A    |
| Flash point:       | N/A    |
| Auto flammability: | N/A    |
| Vapor Pressure:    | N/A    |
| Relative density:  | N/A    |
| Solubility:        | N/A    |

## **SECTION 10: STABILITY AND REACTIVITY**

### **10.1. Reactivity**

N/A

### **10.2. Chemical stability**

Stable under recommended storage conditions

### **10.3. Possibility of hazardous reactions**

N/A

### **10.4. Conditions to avoid**

Strong prolonged heat and contact with incompatible materials

### **10.5. Incompatible materials**

Strong Acids, Strong Bases, Strong Oxidizers, Metals and Metallic compounds

### **10.6. Hazardous decomposition products**

N/A



## **SECTION 11: TOXICOLOGICAL INFORMATION**

### **11.1. Information on toxicological effects**

#### **Component 1**

**Hydrochloric Acid (in pure form):** oral toxicity (LD50 900 mg/kg (rabbit))

|                                       |           |
|---------------------------------------|-----------|
| Common route of entry                 | Ingestion |
| Potential Effects of Acute Exposure   | N/A       |
| Potential Effects of Chronic Exposure | N/A       |
| Symptoms of Overexposure              | N/A       |

#### **Component 2**

**Proclin 300 (in pure form):** LD50 (oral-rat): 3600 mg/kg (100%)

|                                       |   |
|---------------------------------------|---|
| Common route of entry                 | Ingestion   |
| Potential Effects of Acute Exposure   | The product contains <0.1% of Proclin 300TM which corresponds to <0.0015% of its active ingredients. At this low final concentration, this biocidal preservative is irritating to eyes and skin and may be detrimental if enough is ingested (quantities above those found in the kit). |
| Potential Effects of Chronic Exposure | It is a skin sensitizer; prolonged or repeated exposure may cause allergic reaction in certain sensitive individuals.   |
| Symptoms of Overexposure              | Allergic skin reaction  |

## **SECTION 12: ECOLOGICAL INFORMATION**

### **12.1. Toxicity**

N/A

### **12.2. Persistence and degradability**

N/A

### **12.3. Bio accumulative potential**

N/A

### **12.4. Mobility in soil**

N/A

### **12.5. Other adverse effects**

N/A

## **SECTION 13: DISPOSAL CONSIDERATIONS**

### **13.1 Waste Treatment Methods**

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

## **SECTION 14: TRANSPORTATION INFORMATION**

### **14.1. UN number/UN Proper Shipping Name**



N/A.

**14.2. DOT (US)**

N/A.

**14.3. Transport hazard class(es)**

N/A..

**14.4. IMDG**

N/A.

**14.5. IATA**

N/A.

**SECTION 15: REGULATORY INFORMATION**

**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

**SARA 302 Component**

No chemicals in this material are subject to the reporting requirements.

**SARA 313 Components**

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313

**SARA 311/312 Component**

Acute Health Hazard, Chronic Health Hazard

**SECTION 16: OTHER INFORMATION**

**Further information**

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Company shall not be held liable for any damage resulting from handling or from contact with the above product.



# Material Safety Data Sheet

## SECTION 1: IDENTIFICATION OF THE MIXTURE AND OF THE COMPANY

### 1.1. Product identifier

Product Name: Manual Chromogenic Multiplex IHC Kit  
Catalog No.: CP01M-010  
CP02M-010  
CP03M-010  
Kit Component: HRP-Blue Chromogen (50X)

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended use: Immunohistochemistry (IHC)

### 1.3. Details of the supplier of the safety data sheet

MANUFACTURER: Cell IDx, Inc.  
6197 Cornerstone Court E, Ste 102  
San Diego, CA 92121  
EMAIL ADDRESS: info@cellidx.com

### 1.4. Emergency telephone number

9 am-5 pm PST, M-F 858.452.5800

## SECTION 2: HAZARDS IDENTIFICATION

### 2.1. Classification of the mixture

#### GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Acute toxicity, Oral (Category 4), H302  
Eye irritation (Category 2A), H319  
Germ cell mutagenicity (Category 2), H341  
Carcinogenicity (Category 1B), H350

| Component  | Classification   | Concentration |
|--|--|---------------|
| <b>Biphenyl-3,3',4,4'-tetrayltetraammonium tetrachloride</b> |  |               |
|  | Acute Tox. 4; Eye Irrit. 2A; Muta. 2; Carc. 1B; H302, H319, H341, H350 | <= 5%         |
| Component  | Classification   | Concentration |
| <b>Propane-1,2-diol</b>                                      |  |               |
|  |  | <= 60%        |
| Component  | Classification   | Concentration |
| <b>Hydroxynaphthalene hydrocarbon</b>                        |  |               |
|  | Skin Irrit. 2; Eye Irrit. 2A; STOT SE 3; H315, H319, H335              | <=1%          |

### 2.2. GHS label elements

Danger





Harmful if swallowed  
Suspected of causing genetic defects.  
May cause cancer.  
Obtain special instructions before use.  
Do not handle until all safety precautions have been read and understood.  
Wash hands thoroughly after handling.  
Do not eat, drink or smoke when using this product.  
Wear protective gloves/protective clothing/eye protection/face protection.  
IF SWALLOWED: call a POISON CENTER or doctor/physician IF you feel unwell.  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
IF exposed or concerned: Get medical advice/attention.  
IF eye irritation persists: Get medical advice/attention.  
Store locked up.  
Dispose of contents/container to an approved waste disposal plant

### 2.3. Other hazards which do not result in classification

None

## SECTION 3: COMPOSITION/ INFORMATION ON INGREDIENTS

| Description   | CAS#      | EINECS#   | %       |
|---|-----------|-----------|---------|
| Biphenyl-3,3',4,4'-tetrayltetraammonium tetrachloride | 7411-49-6 | 231-018-9 | 2 - 5   |
| Hydroxynaphthalene hydrocarbon                        | 5111-66-0 | N/A       | 0.5 - 1 |
| 1,2-propane-diol                                      | 57-55-6   | 200-338-0 | 50 - 60 |

## SECTION 4: FIRST AID MEASURES

### 4.1. Description of first aid measures

#### General Advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

#### If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

#### In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

#### In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

#### If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

### 4.2. Most important symptoms and effects, both acute and delayed

#### Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

### 4.3 Indication of immediate medical attention and special treatment needed, if necessary

#### Indication of any immediate medical attention and special treatment needed

No data available

## SECTION 5: FIREFIGHTING MEASURES





### 5.1. Extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

### 5.2. Special hazards arising from the substance or mixture

Carbon oxides, Nitrogen oxides (NO<sub>x</sub>), Hydrogen chloride gas

### 5.3. Special advice for firefighters

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

### 6.1. Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

For personal protection see section 8.

### 6.2. Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

### 6.3. Methods and material for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

## SECTION 7: HANDLING AND STORAGE

### 7.1. Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into consideration before additional processing occurs.

Provide appropriate exhaust ventilation at places where dust is formed.

For precautions see section 2

### 7.2. Conditions for safe storage, including any incompatibilities

Store with desiccant. Keep container tightly closed in a dry and well-ventilated place

Recommended storage temperature 4°C.

Light sensitive

Storage class (TRGS 510) Non-combustible, acute toxic Cat.3/ toxic hazardous materials or hazardous materials causing chronic effects.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters

#### Components with workplace control parameters

| Component        | CAS-No. | Value | Control parameters          | Basis   |
|------------------|---------|-------|-----------------------------|---|
| Propane-1,2-diol | 57-55-6 | TWA   | 10.000000 mg/m <sup>3</sup> | USA. Workplace Environmental Exposure Levels (WEEL) |

### 8.2 Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

### 8.3 Exposure controls

#### Eye/face protection



Safety glasses with side-shields conforming to EN166. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN166 (EU)

#### **Skin Protection**

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (with touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable law and good laboratory practices. Wash and dry hands.

#### **Full contact**

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: 480 min

Material Tested: Dermatrill (KCL 740/Aldrich Z677272, size M)

#### **Splash Contact**

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: 480 min

Material Tested: Dermatrill (KCL 740/Aldrich Z677272, size M)

Data Source: KCL GmgH, D-36124 Eichenzell, phone +49 90)6659 87300, e-mail [sales@kcl.de](mailto:sales@kcl.de), test method EN374

If used in solution or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

#### **Body Protection**

Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of dangerous substance at the specific workplace.

#### **Respiratory Protection**

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

#### **Control of environmental exposure**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique.

## **SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

### **9.1. Information on basic physical and chemical properties**

|   |                                   |
|---|-----------------------------------|
| Appearance                                      | Form: Liquid<br>Color: tan/purple |
| Odor  | No Data Available                 |
| Odor Threshold                                  | No Data Available                 |
| pH  | No Data Available                 |
| Melting Point/Freezing Point                    | No Data Available                 |
| Initial Boiling Point                           | No Data Available                 |
| Flash Point                                     | No Data Available                 |
| Evaporation Rate                                | No Data Available                 |
| Flammability (Solid, Gas)                       | No Data Available                 |
| Upper/Lower Flammability<br>or explosive limits | No Data Available                 |
| Vapor Pressure                                  | No Data Available                 |



|                           |                   |
|---------------------------|-------------------|
| Vapor Density             | No Data Available |
| Relative Density          | No Data Available |
| Water Solubility          | Soluble           |
| Partition Coefficient     | No Data Available |
| Auto-ignition Temperature | No Data Available |
| Decomposition Temperature | No Data Available |
| Viscosity                 | No Data Available |
| Explosive Properties      | No Data Available |
| Oxidizing Properties      | No Data Available |

## 9.2. Other information

None

## SECTION 10: STABILITY AND REACTIVITY

### 10.1. Reactivity

No data available

### 10.2. Chemical stability

May darken on storage

Stable under recommended storage conditions

### 10.3. Possibility of hazardous reactions

No data available

### 10.4. Conditions to avoid

Avoid exposure to moisture or light.

### 10.5. Incompatible materials

Materials To Avoid

Acid chlorides, Acid anhydrides, Oxidizing agents, Chloroformates, Reducing agents

### 10.6. Hazardous decomposition products

Other decomposition products – No data available

## SECTION 11: TOXICOLOGICAL INFORMATION

### 11.1. Information on toxicological effects

|                                  |                   |
|----------------------------------|-------------------|
| Acute toxicity:                  | No Data Available |
| Acute Toxicity (Oral LD50)       | Mouse 330 mg/kg   |
| Skin Corrosion/Irritation:       | No Data Available |
| Human Skin Model Test            | No Data Available |
| Serious eye damage/irritation    | No Data Available |
| Respiratory sensitization        | No Data Available |
| Skin sensitization               | No Data Available |
| Germ cell mutagenicity (InVitro) | No Data Available |
| Carcinogenicity                  | No Data available |

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by NTP.



OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by OSHA

Reproductive Toxicity No Data available

Specific target organ toxicity:

Single Exposure No Data Available

Repeated Exposure No Data Available

Aspiration hazard: No Data Available

#### Additional Information

RTECS: DV8753000

To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated.

### **SECTION 12: ECOLOGICAL INFORMATION**

**12.1. Toxicity** Toxicity to daphnia and other aquatic invertebrates  
EC50 - Daphnia magna (Water flea) - 32 mg/l - 24 h

#### **12.2. Persistence and degradability**

No data available

#### **12.3. Bio accumulative potential**

No data available

#### **12.4. Mobility in soil**

No data available

#### **12.5. Other adverse effects**

Not determined

### **SECTION 13: DISPOSAL CONSIDERATIONS**

#### **13.1 Disposal Methods**

##### **Product**

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

##### **Contaminated Packaging**

Dispose of as unused product

### **SECTION 14: TRANSPORTATION INFORMATION**

#### **14.1. UN number**

Not applicable.

#### **14.2. DOT (US)**

Not dangerous good

#### **14.3. Transport hazard class(es)**

Not dangerous goods.

#### **14.4. IMDG**

Not dangerous goods



#### 14.5. IATA

Not dangerous good

### SECTION 15: REGULATORY INFORMATION

#### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

##### SARA 302 Component

This material does not contain any chemical components with known CSA numbers that exceed the threshold (DeMinimus) reporting levels established by SARA Title III, Section 302.

##### SARA 312 Component

This material does not contain any chemical components with known CSA numbers that exceed the threshold (DeMinimus) reporting levels established by SARA Title III, Section 312.

##### Massachusetts, New Jersey, Pennsylvania Right to Know Components

|   |                   |
|---|-------------------|
| Biphenyl-3-3',4-4'-tetrayltetraammonium tetrachloride | CAS-No. 7411-49-6 |
| Hydroxynaphthalene hydrocarbon                        | CAS-No. 5111-66-0 |

##### California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

Approved Code Of Practice

### SECTION 16: OTHER INFORMATION

#### Full text of H-Statements referred to under sections 2 and 3.

|            |                                       |
|------------|---------------------------------------|
| Acute Tox. | Acute toxicity                        |
| Carc.      | Carcinogenicity                       |
| Eye Irrit. | Eye irritation                        |
| H302       | Harmful if swallowed.                 |
| H319       | Causes serious eye irritation.        |
| H341       | Suspected of causing genetic defects. |
| H350       | May cause cancer.                     |
| Muta.      | Germ cell mutagenicity                |

##### HMIS Rating

|                        |   |
|------------------------|---|
| Health hazard:         | 2 |
| Chronic Health Hazard: | * |
| Flammability:          | 0 |
| Physical Hazard        | 0 |

##### NFPA Rating

|                    |   |
|--------------------|---|
| Health hazard:     | 2 |
| Fire Hazard:       | 0 |
| Reactivity Hazard: | 0 |

##### Further information

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Company shall not be held liable for any damage resulting from handling or from contact with the above product.



## ***Material Safety Data Sheet***

### **SECTION 1: IDENTIFICATION OF THE MIXTURE AND OF THE COMPANY**

#### **1.1. Product identifier**

|                       |   |
|-----------------------|---|
| <b>Product Name:</b>  | <b>Manual Chromogenic Multiplex IHC Kit</b> |
| <b>Catalog No.:</b>   | <b>CP01M-010</b>                            |
|                       | <b>CP02M-010</b>                            |
|                       | <b>CP03M-010</b>                            |
| <b>Kit Component:</b> | <b>HRP-Blue Buffer (1X)</b>                 |

#### **1.2. Relevant identified uses of the substance or mixture and uses advised against**

Recommended use: Immunohistochemistry (IHC)

#### **1.3. Details of the supplier of the safety data sheet**

|                                   |                       |
|-----------------------------------|-----------------------|
| <b>MANUFACTURER</b>               | <b>EMAIL ADDRESS:</b> |
| Cell IDx, Inc.                    | info@cellidx.com      |
| 6197 Cornerstone Court E, Ste 102 |                       |
| San Diego, CA 92121               |                       |

#### **1.4. Emergency telephone number**

9 am-5 pm PST, M-F 858.452.5800

### **SECTION 2: HAZARDS IDENTIFICATION**

#### **2.1. Classification of the mixture**

##### **GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**

Skin corrosion (Category 1B), H314  
Serious eye Damage (Category 1), H318  
Reproductive toxicity (Category 1B), H360

#### **2.2. GHS label elements**

**Danger**



Cause severe skin burns and eye damage

May damage fertility or an unborn child

Obtain special instructions before use

Do not handle until all safety precautions have been read and understood

Wash hands thoroughly after handling

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting

IF ON SKIN/Hair: Remove/Take off immediately all contaminated clothing. Rinse SKIN with water/shower.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

#### **2.3. Other hazards which do not result in classification**

None

#### **Substance/mixture:**

#### **Mixture**

There are no ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section. Occupational exposure limits, if available, are listed in Section 8.



### **SECTION 3: COMPOSITION/ INFORMATION ON INGREDIENTS**

| <b>Description</b>        | <b>CAS#</b> | <b>EINECS#</b> | <b>%</b> |
|---------------------------|-------------|----------------|----------|
| Sodium dihydrogen citrate | 18996-35-5  | 201-069-1      | 0.5-1    |

### **SECTION 4: FIRST AID MEASURES**

#### **4.1. Description of first aid measures**

##### **General Advice**

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

##### **If inhaled**

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

##### **In case of skin contact**

Wash off with soap and plenty of water. Consult a physician.

##### **In case of eye contact**

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. Continue rinsing eyes during transport to hospital.

##### **If swallowed**

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

#### **4.2. Most important symptoms and effects, both acute and delayed**

##### **Most important symptoms and effects, both acute and delayed**

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

#### **4.3 Indication of immediate medical attention and special treatment needed, if necessary**

No data available

### **SECTION 5: FIREFIGHTING MEASURES**

#### **5.1. Extinguishing media**

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

#### **5.2. Special hazards arising from the substance or mixture**

Carbon oxides, Nitrogen oxides (NOx), Hydrogen cyanide (hydrocyanic acid), Ammonia

#### **5.3. Special advice for firefighters**

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

### **SECTION 6: ACCIDENTAL RELEASE MEASURES**

#### **6.1. Personal precautions, protective equipment and emergency procedures**

Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

For personal protection see section 8.

#### **6.2. Environmental precautions**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

#### **6.3. Methods and material for containment and cleaning up**

Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.



## **SECTION 7: HANDLING AND STORAGE**

### **7.1. Precautions for safe handling**

Avoid inhalation of vapor or mist.

For precautions, see section 2.2

### **7.2. Conditions for safe storage, including any incompatibilities**

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

## **SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

### **8.1 Control parameters**

#### **Components with workplace control parameters**

Contains no substance with occupational exposure limit values.

### **8.2 Appropriate engineering controls**

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

### **8.3 Exposure controls**

#### **Eye/face protection**

Tightly fitting safety goggles. Face shield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

#### **Skin Protection**

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (with touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable law and good laboratory practices. Wash and dry hands.

Full contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: 480 min

Splash Contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: 480 min

Material Tested: Dermatrill (KCL 740/Aldrich Z677272, size M)

Data Source: KCL GmG, D-36124 Eichenzell, phone +49 90)6659 87300, e-mail sales@kcl.de, test method: EN374

If used in solution or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

#### **Body Protection**

Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of dangerous substance at the specific workplace.

#### **Respiratory Protection**

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls.





If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

#### **Control of environmental exposure**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

## **SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

### **9.1. Information on basic physical and chemical properties**

|   |   |
|---|---|
| Appearance                                      | Form: Liquid<br>Color: Clear            |
| Odor  | No Data Available                       |
| Odor Threshold                                  | No Data Available                       |
| pH  | 6.0                                     |
| Melting Point/Freezing Point                    | No Data Available                       |
| Initial Boiling Point                           | No Data Available                       |
| Flash Point                                     | No Data Available                       |
| Evaporation Rate                                | No Data Available                       |
| Flammability (Solid, Gas)                       | No Data Available                       |
| Upper/Lower Flammability<br>or explosive limits | No Data Available                       |
| Vapor Pressure                                  | No Data Available                       |
| Vapor Density                                   | No Data Available                       |
| Relative Density                                | 1.01 g/cm <sup>3</sup> at 20 °C (68 °F) |
| Water Solubility                                | No Data Available                       |
| Partition Coefficient                           | No Data Available                       |
| Auto-ignition Temperature                       | No Data Available                       |
| Decomposition Temperature                       | No Data Available                       |
| Viscosity                                       | No Data Available                       |
| Explosive Properties                            | No Data Available                       |
| Oxidizing Properties                            | No Data Available                       |

### **9.2. Other information**

None

## **SECTION 10: STABILITY AND REACTIVITY**

### **10.1. Reactivity**

No data available

### **10.2. Chemical stability**

Stable under recommended storage conditions

### **10.3. Possibility of hazardous reactions**

No data available

### **10.4. Conditions to avoid**

No data available

### **10.5. Incompatible materials**

Materials To Avoid

Acid, Acid anhydrides, Strong Oxidizing agents

### **10.6. Hazardous decomposition products**



Other decomposition products – No data available  
In the event of fire: see Section 5

## **SECTION 11: TOXICOLOGICAL INFORMATION**

### **11.1. Information on toxicological effects**

|                                  |  |
|----------------------------------|--|
| Acute toxicity:                  | No Data Available  |
| Inhalation:                      | No Data Available  |
| Dermal:                          | No Data Available  |
| Skin Corrosion/Irritation:       | No Data Available  |
| Serious eye damage/irritation    | No Data Available  |
| Respiratory sensitization        | No Data Available  |
| Skin sensitization               | No Data Available  |
| Germ cell mutagenicity (InVitro) | No Data Available  |
| Carcinogenicity                  | No Data available  |
| IARC:                            | No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC   |
| ACGIH:                           | No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by ACGIH. |
| NTP:                             | No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by NTP.   |
| OSHA:                            | No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by OSHA   |
| Reproductive Toxicity            | No Data available  |
| Specific target organ toxicity:  |  |
| Single Exposure                  | No Data Available  |
| Repeated Exposure                | No Data Available  |
| Aspiration hazard:               | No Data Available  |

Additional Information  
RTECS: Not available

To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated.

### **11.2. Information on the likely routes of exposure**

#### **Potential acute health effects**

|              |  |
|--------------|--|
| Eye Contact  | Not Available                                    |
| Inhalation   | No known significant effects or critical hazards |
| Skin Contact | No known significant effects or critical hazards |
| Ingestion    | No known significant effects or critical hazards |

### **11.3. Symptoms related to the physical, chemical and toxicological characteristics**

|              |  |
|--------------|--|
| Eye Contact  | No specific data                                 |
| Inhalation   | No known significant effects or critical hazards |
| Skin contact | No specific data                                 |
| Ingestion    | No Specific Data                                 |

### **11.4. Delayed and immediate effects and also chronic effects from short- and long-term exposure**

#### **Delayed and immediate effects and also chronic effects from short- and long-term exposure**

|                             |                |
|-----------------------------|----------------|
| Short term exposure         | Not available. |
| Potential immediate effects | Not available  |



|   |   |
|---|---|
| Potential delayed effects               | Not available.                                    |
| <b>Long term exposure</b>               |   |
| Potential immediate effects             | Not available.                                    |
| Potential delayed effects               | Not available.                                    |
| <b>Potential chronic health effects</b> |   |
| General                                 | No known significant effects or critical hazards. |
| Carcinogenicity                         | No known significant effects or critical hazards. |
| Mutagenicity                            | No known significant effects or critical hazards. |
| Teratogenicity                          | No known significant effects or critical hazards. |
| Developmental effects                   | No known significant effects or critical hazards. |
| Fertility effects                       | No known significant effects or critical hazards. |

#### **11.5. Numerical measure of toxicity (such as acute toxicity estimates)**

Not available

### **SECTION 12: ECOLOGICAL INFORMATION**

#### **12.1. Toxicity**

No data available

#### **12.2. Persistence and degradability**

No data available

#### **12.3. Bio accumulative potential**

No data available

#### **12.4. Mobility in soil**

No data available

#### **12.5. Other adverse effects**

Not determined

### **SECTION 13: DISPOSAL CONSIDERATIONS**

#### **13.1 Disposal Methods**

##### **Product**

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

##### **Contaminated Packaging**

Dispose of as unused product

### **SECTION 14: TRANSPORTATION INFORMATION**

#### **14.1. UN number/UN Proper Shipping Name**

Not applicable.

#### **14.2. DOT (US)**

Not dangerous good

#### **14.3. Transport hazard class(es)**

Not dangerous goods.

#### **14.4. IMDG**



Not dangerous goods

#### 14.5. IATA

Not dangerous good

### **SECTION 15: REGULATORY INFORMATION**

#### **15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

##### **SARA 302 Component**

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302

##### **SARA 313 Components**

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313

##### **SARA 311/312 Component**

Acute Health Hazard, Chronic Health Hazard

##### **Massachusetts, New Jersey, Pennsylvania Right to Know Components**

Sodium dihydrogen citrate CAS-No. 18996-35-5

##### **California Prop. 65 Components**

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

### **SECTION 16: OTHER INFORMATION**

#### **Full text of H-Statements referred to under sections 2 and 3.**

|            |   |
|------------|---|
| Acute Tox. | Acute toxicity                            |
| Eye Dam.   | Serious eye damage                        |
| H302       | Harmful if swallowed.                     |
| H314       | Causes severe skin burns and eye damage.  |
| H318       | Causes serious eye damage.                |
| H360       | May damage fertility or the unborn child. |
| Repr.      | Reproductive toxicity                     |
| Skin Corr. | Skin corrosion                            |

##### **HMIS Rating**

|                        |   |
|------------------------|---|
| Health hazard:         | 1 |
| Chronic Health Hazard: | 0 |
| Flammability:          | 0 |
| Physical Hazard        | 0 |

##### **NFPA Rating**

|                    |   |
|--------------------|---|
| Health hazard:     | 1 |
| Fire Hazard:       | 0 |
| Reactivity Hazard: | 0 |

##### **Further information**

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product regarding appropriate safety precautions. It does not represent any guarantee of the properties of the product. Company shall not be held liable for any damage resulting from handling or from contact with the above product.



## MATERIAL SAFETY DATA SHEET

### Section 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1: Product Identifier

**Product Name:** Manual Chromogenic Multiplex IHC Kit  
**Catalog No.:** CP01M-010  
CP02M-010  
CP03M-010  
**Kit Components:** Antibody Diluent

#### 1.2: Product Uses

Immunohistochemistry. For Research Use Only. Not intended for human or animal diagnostic products.

#### 1.3: Company/undertaking Identification

Cell IDx, Inc.  
6197 Cornerstone Court E, Ste 102  
San Diego, CA 92121

858.452.5800

### Section 2: Hazardous Identification

#### 2.1: Classification of the substance or material

GHS-US classification

#### 2.2: Label Elements

GHS-US labeling  
No label applicable

#### 2.3: Other Hazards

No additional information available

#### 2.4: Principal Routes of Exposure/Potential Health Effects

|            |  |
|------------|--|
| Eyes       | May cause irritation with susceptible persons    |
| Skin       | May cause skin irritation in susceptible persons |
| Inhalation | May be harmful by inhalation                     |
| Ingestion  | May be harmful if swallowed                      |

### Section 3: Composition/information on ingredients

| Chemical Name | CAS#       | Percent |
|---------------|------------|---------|
| Proclin 150   | 10377-60-3 | 0.1%    |

### Section 4: First Aid Measures

#### Skin contact

Immediately wash well with mild soap and copious amounts of water. Remove any contaminating clothing. Flush skin with additional water.

#### Eye contact

Immediately flush eyes with copious amounts of water for at least 15 minutes. If symptoms persist, call a physician.

#### Ingestion

Flush mouth with copious amounts of water. Do not swallow water.



## **Inhalation**

If inhaled, move victim to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen and call physician. If warranted, seek medical attention. If possible, save sample of material that caused reaction for use in determination of appropriate treatment.

## **Section 5: Firefighting measures**

|  |  |
|--|--|
| <b>Suitable extinguishing media</b>                  | Not applicable, substance is non-flammable |
| <b>Special protective equipment for firefighters</b> | Not applicable                             |
| <b>Specific hazards arising from the chemical</b>    | Not applicable                             |

## **Section 6: Accidental release measures**

|                                  |  |
|----------------------------------|--|
| <b>Personal precautions</b>      | Always wear recommended Personal Protective Equipment. Use personal protection equipment.  |
| <b>Methods for cleaning up</b>   | Soak up with inert absorbent material.   |
| <b>Environmental precautions</b> | No special environmental precautions required  |
| <b>Other precautions</b>         | Avoid contact and inhalation: do not get in eyes, on skin or clothing. Do not pipet by mouth. Wash contaminated clothing before use. |

## **Section 7: Handling and Storage**

|                 |  |
|-----------------|--|
| <b>Handling</b> | Always wear recommended Personal Protective Equipment. No special handling advice are necessary. |
| <b>Storage</b>  | 2-8 °C   |

## **Section 8: Exposure controls/personal protection**

**8.1. Control parameters**  
No additional information available.

|                                   |  |
|-----------------------------------|--|
| <b>8.2. Exposure controls</b>     |  |
| Appropriate engineering controls: | None   |
| Hand protection:                  | Wear suitable gloves.  |
| Eye protection:                   | Safety glasses or goggles are recommended when handling product.   |
| Skin and body protection:         | Wear suitable protective clothing.   |
| Respiratory protection:           | None   |
| Environmental exposure controls:  | Maintain levels below Community environmental protection thresholds.   |
| Other information:                | Do not eat, smoke or drink where material is handled, processed or stored. Wash hands carefully before eating or smoking. Handle according to established industrial hygiene and safety practices. |

## **Section 9: Physical and chemical properties**

### **9.1. Information on basic physical and chemical properties**

|                 |                          |
|-----------------|--------------------------|
| Physical state: | Liquid                   |
| Appearance:     | No information available |
| Color:          | No information available |



|   |                   |
|---|-------------------|
| Odor:                                       | No data available |
| Odor threshold:                             | No data available |
| pH:   | No data available |
| Melting point:                              | No data available |
| Freezing point:                             | No data available |
| Boiling point:                              | No data available |
| Flash point:                                | No data available |
| Relative evaporation rate (butylacetate=1): | No data available |
| Flammability (solid, gas):                  | Not flammable     |
| Explosive limits:                           | No data available |
| Explosive properties:                       | No data available |
| Oxidizing properties:                       | No data available |
| Vapor pressure:                             | No data available |
| Relative density:                           | No data available |
| Relative vapor density at 20 °C:            | No data available |
| Solubility:                                 | Water Soluble     |
| Partition coefficient: n-octanol/water:     | No data available |
| Log Kow:                                    | No data available |
| Auto-ignition temperature:                  | No data available |
| Decomposition temperature:                  | No data available |
| Viscosity:                                  | No data available |
| Viscosity, kinematic:                       | No data available |
| Viscosity, dynamic:                         | No data available |

## **Section 10: Stability and reactivity**

|   |   |
|---|---|
| <b>Stability</b>                          | Stable under normal conditions.                             |
| <b>Materials to avoid</b>                 | No dangerous reaction known under conditions of normal use. |
| <b>Possibility of hazardous reactions</b> | Hazardous reaction has not been reported                    |
| <b>Hazardous decomposition</b>            | None under normal use conditions.                           |
| <b>Products</b>                           |   |
| <b>Polymerization</b>                     | Hazardous polymerization does not occur.                    |
| <b>Conditions to avoid</b>                | None under normal processing                                |

## **Section 11: Toxicological information**

|                                 |  |
|---------------------------------|--|
| <b>Acute Toxicity</b>           | No toxicology information is available.            |
| <b>Potential Health Effects</b> |  |
| Eyes                            | May cause eye irritation with susceptible persons. |
| Skin                            | May cause skin irritation in susceptible persons.  |
| Inhalation                      | May be harmful by inhalation.                      |
| Ingestion                       | May be harmful if swallowed.                       |

## **Section 12: Ecological information**

|                        |         |
|------------------------|---------|
| <b>Ecotoxicity</b>     | Unknown |
| <b>Mobility</b>        | Unknown |
| <b>Biodegradation</b>  | Unknown |
| <b>Bioaccumulation</b> | Unknown |

## **Section 13: Disposal considerations**



### **13.1 Waste treatment Recommendations**

This material must be disposed of in accordance with all local, state, provincial and federal regulations. The generation of waste should be avoided or minimized wherever possible.

## **Section 14: Transport information**

|                                    |   |
|------------------------------------|---|
| Department of Transportation (DOT) | In accordance with DOT  |
| Not regulated for transport.       | Not classified as dangerous in the meaning of transport regulations |
| Other information                  | No supplementary information available                              |
| Special transport precautions      | Not applicable  |

## **Section 15: Regulatory information**

SARA: SARA 302 - No chemicals in this material are subject to the reporting requirements.  
SARA 313 - No chemicals in this material with known CAS #s is subject to the reporting requirements.  
SARA 311/312 Hazards - No SARA Hazards.

California Prop. 65 components: This product does not contain any chemicals known to the state of California to cause cancer, birth defects or other reproductive harm

## **Section 16: Other information**

Other information:                      None.

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## MATERIAL SAFETY DATA SHEET

### Section 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1: Product Identifier

**Product Name:** Manual Chromogenic Multiplex IHC Kit

**Catalog No.:** CP01M-010

CP02M-010

CP03M-010

**Kit Components:** Peroxidase Block 2

#### 1.2: Product Uses

Immunohistochemistry. For Research Use Only. Not intended for human or animal diagnostic products.

#### 1.3: Company/undertaking Identification

Cell IDx, Inc.

6197 Cornerstone Court E, Ste 102

San Diego, CA 92121

858.452.5800

### Section 2: Hazardous Identification

#### 2.1: Classification of the substance or material

GHS-US classification

#### 2.2: Label Elements

GHS-US labeling

No label applicable

#### 2.3: Other Hazards

Carcinogenic effects None

Mutagenic effects None

Reproductive toxicity None

Sensitization None

May cause fire or explosion if exposed to heat

#### 2.4: Principal Routes of Exposure/Potential Health Effects

Eyes May cause irritation with susceptible persons

Can cause severe eye damage

Skin May cause skin irritation in susceptible persons

Inhalation May be harmful by inhalation

Ingestion May be harmful if swallowed

### Section 3: Composition/information on ingredients

| Chemical Name     | CAS#      | Percent |
|-------------------|-----------|---------|
| Hydrogen Peroxide | 7722-84-1 | 3%      |

### Section 4: First Aid Measures



|                     |  |
|---------------------|--|
| <b>Skin contact</b> | Immediately wash well with mild soap and copious amounts of water. Remove any contaminating clothing. Flush skin with additional water.  |
| <b>Eye contact</b>  | Immediately flush eyes with copious amounts of water for at least 15 minutes. If symptoms persist, call a physician.   |
| <b>Ingestion</b>    | Do not induce vomiting. Dilute with water milk and have exposed individual drink sips of water.  |
| <b>Inhalation</b>   | If inhaled, move victim to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen and call physician. If warranted, seek medical attention. If possible, save sample of material that caused reaction for use in determination of appropriate treatment. |

## **Section 5: Firefighting measures**

|  |  |
|--|--|
| <b>Suitable extinguishing media</b>                  | If in laboratory setting, follow fire suppression procedures. Use appropriate fire suppression agents for adjacent combustible materials or sources of ignition. |
| <b>Special protective equipment for firefighters</b> | Do not attempt to take action without suitable protective equipment<br>Self-contained breathing apparatus and complete protective clothing                       |
| <b>Specific hazards arising from the chemical</b>    | Combustion products may include carbon oxides or other toxic vapors.   |

## **Section 6: Accidental release measures**

|                                |   |
|--------------------------------|---|
| <b>Personal precautions</b>    | Always wear recommended Personal Protective Equipment. Use personal protection equipment.   |
| <b>Methods for cleaning up</b> | Absorb spills of reagents with absorbent paper, taking care not to spread the material. Clean spill area with water.                                    |
| <b>Other precautions</b>       | Avoid contact and inhalation: do not get in eyes, on skin or clothing. Do not pipet by mouth. Wash contaminated clothing before use. Protect from heat. |

## **Section 7: Handling and Storage**

|                 |   |
|-----------------|---|
| <b>Handling</b> | Always wear recommended Personal Protective Equipment. Keep from contact with oxidizing materials. Store in cool, dry place. Keep away from heat. |
| <b>Storage</b>  | 2-8 °C  |

## **Section 8: Exposure controls/personal protection**

**8.1. Control parameters**  
No additional information available.

|                                   |  |
|-----------------------------------|--|
| <b>8.2. Exposure controls</b>     |  |
| Appropriate engineering controls: | None   |
| Hand protection:                  | Wear suitable gloves.  |
| Eye protection:                   | Safety glasses or goggles are recommended when handling product. |
| Skin and body protection:         | Wear suitable protective clothing.                               |
| Respiratory protection:           | None   |



|                                  |  |
|----------------------------------|--|
| Environmental exposure controls: | Maintain levels below Community environmental protection thresholds.   |
| Other information:               | Do not eat, smoke or drink where material is handled, processed or stored. Wash hands carefully before eating or smoking. Handle according to established industrial hygiene and safety practices. Remove, if any, all soiled and contaminated clothing. |

## Section 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

|   |                          |
|---|--------------------------|
| Physical state:                             | Liquid                   |
| Appearance:                                 | No information available |
| Color:                                      | No information available |
| Odor:                                       | No data available        |
| Odor threshold:                             | No data available        |
| pH:   | No data available        |
| Melting point:                              | No data available        |
| Freezing point:                             | No data available        |
| Boiling point:                              | No data available        |
| Flash point:                                | No data available        |
| Relative evaporation rate (butylacetate=1): | No data available        |
| Flammability (solid, gas):                  | Not flammable            |
| Explosive limits:                           | No data available        |
| Explosive properties:                       | No data available        |
| Oxidizing properties:                       | No data available        |
| Vapor pressure:                             | No data available        |
| Relative density:                           | No data available        |
| Relative vapor density at 20 °C:            | No data available        |
| Solubility:                                 | Water Soluble            |
| Partition coefficient: n-octanol/water:     | No data available        |
| Log Kow:                                    | No data available        |
| Auto-ignition temperature:                  | No data available        |
| Decomposition temperature:                  | No data available        |
| Viscosity:                                  | No data available        |
| Viscosity, kinematic:                       | No data available        |
| Viscosity, dynamic:                         | No data available        |

## Section 10: Stability and reactivity

|   |   |
|---|---|
| <b>Stability</b>                          | Stable under normal conditions.                                       |
| <b>Materials to avoid</b>                 | Strong acids and bases, oxidizing agents.                             |
| <b>Possibility of hazardous reactions</b> | Hazardous reaction has not been reported                              |
| <b>Hazardous decomposition</b>            | Nitrogen oxides, hydrogen gas, oxygen, hydrazoic acid, carbon oxides. |
| <b>Products</b>                           |   |
| <b>Polymerization</b>                     | Hazardous polymerization does not occur.                              |
| <b>Conditions to avoid</b>                | None under normal processing  |

## Section 11: Toxicological information

|                       |   |
|-----------------------|---|
| <b>Acute Toxicity</b> | No toxicology information is available. |
|-----------------------|---|

### Potential Health Effects

Issued 2/22/2022



|            |  |
|------------|--|
| Eyes       | May cause eye irritation with susceptible persons. |
| Skin       | May cause skin irritation in susceptible persons.  |
| Inhalation | May be harmful by inhalation.                      |
| Ingestion  | May be harmful if swallowed.                       |

## **Section 12: Ecological information**

|                        |         |
|------------------------|---------|
| <b>Ecotoxicity</b>     | Unknown |
| <b>Mobility</b>        | Unknown |
| <b>Biodegradation</b>  | Unknown |
| <b>Bioaccumulation</b> | Unknown |

## **Section 13: Disposal considerations**

|   |  |
|---|--|
| <b>13.1 Waste treatment Recommendations</b> | This material must be disposed of in accordance with all local, state, provincial and federal regulations. The generation of waste should be avoided or minimized wherever possible. |
|---|--|

## **Section 14: Transport information**

### **IATA**

|                      |   |
|----------------------|---|
| Proper shipping name | Not classified as dangerous in the meaning of transport regulations |
| Hazard Class         | 5.1 Oxidizing substances  |
| Subsidiary Class     | None  |
| Packing Group        | None  |
| UN-No                | None  |

## **Section 15: Regulatory information**

SARA: SARA 302 - No chemicals in this material are subject to the reporting requirements.  
SARA 313 - No chemicals in this material with known CAS #s is subject to the reporting requirements.  
SARA 311/312 Hazards - No SARA Hazards.

California Prop. 65 components: This product does not contain any chemicals known to the state of California to cause cancer, birth defects or other reproductive harm

## **Section 16: Other information**

Other information: None.

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## MATERIAL SAFETY DATA SHEET

### Section 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1: Product Identifier

**Product Name:** Manual Chromogenic Multiplex IHC Kit  
**Catalog No.:** CP01M-010  
CP02M-010  
CP03M-010  
**Kit Component:** Cell IDx Rabbit Block

**1.2: Product Uses** Immunohistochemistry

#### 1.3: Company/undertaking Identification

Cell IDx, Inc.  
6197 Cornerstone Court E, Ste 102  
San Diego, CA 92121

858.452.5800

### Section 2: Hazardous Identification

#### 2.1: Classification of the substance or material

**HEALTH HAZARD:** not hazardous

**PHYSICAL HAZARDS:** not hazardous

#### PRINCIPLE ROUTES OF EXPOSURE/ POTENTIAL HEALTH EFFECTS

**Eyes:** May cause eye irritation with susceptible persons.  
**Skin:** May cause skin irritation in susceptible persons.  
**Inhalation:** May be harmful by inhalation.  
**Ingestion:** May be harmful by if swallowed.

#### 2.2: Label Elements

Not Applicable

#### 2.3: Other Hazards

**Carcinogenic effects:** None  
**Mutagenic effects:** None  
**Reproductive toxicity:** None  
**Sensitization:** None

**Target Organ Effects:** No known effects under normal use conditions

### Section 3: Composition/information on ingredients

| Chemical Name | CAS#       | EC# | Percent |
|---------------|------------|-----|---------|
| Proclin 150   | 10377-60-3 | NA  | 0.1%    |

### Section 4: First Aid Measures

**Skin contact**

Immediately wash well with mild soap and copious amounts of water. Remove any contaminating clothing. Flush skin with additional water.

**Eye contact**

Immediately flush eyes with copious amounts of water for at least 15 minutes. If symptoms persist, call a physician.

**Ingestion**

Flush mouth with copious amounts of water. Do not swallow water.

**Inhalation**

If inhaled, move victim to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen and call physician. If warranted, seek medical attention. If possible, save sample of material that caused reaction for use in determination of appropriate treatment.

**Section 5: Firefighting measures****Suitable extinguishing media**

Not applicable, non-flammable

**Special protective equipment for firefighters**

Not applicable, non-flammable

**Specific hazards arising from the chemical**

Not applicable

**Section 6: Accidental release measures****Personal precautions**

Always wear recommended Personal Protective Equipment. Use personal protection equipment.

**Methods for cleaning up**

Soak up with inert absorbent material. Clean spill area with water

**Environmental precautions**

No special environmental precautions required

**Other precautions**

Avoid contact and inhalation: do not get in eyes, on skin or clothing. Do not pipet by mouth. Wash contaminated clothing before use.

**Section 7: Handling and Storage****Handling**

Always wear recommended Personal Protective Equipment. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor.

**Storage**

2-8 °C. Keep only in the original container in a cool, well-ventilated place away from metals. Keep container closed when not in use

**Section 8: Exposure controls/personal protection****8.1. Control parameters**

No additional information available.

**8.2. Exposure controls**

Appropriate engineering controls:

None

Ventilation:

None

Hand protection:

Wear suitable gloves.

Eye protection:

Safety glasses or goggles are recommended when handling product.

Skin and body protection:

Wear suitable protective clothing.

Respiratory protection:

None

Environmental exposure controls:

None



Other information:

Do not eat, smoke or drink where material is handled, processed or stored. Wash hands carefully before eating or smoking. Handle according to established industrial hygiene and safety practices.

## **Section 9: Physical and chemical properties**

### **9.1. Information on basic physical and chemical properties**

|   |                   |
|---|-------------------|
| Physical state:                             | Liquid            |
| Appearance:                                 | No data available |
| Color:                                      | Colorless         |
| Odor:                                       | No data available |
| Odor threshold:                             | No data available |
| pH:   | No data available |
| Melting point:                              | No data available |
| Freezing point:                             | No data available |
| Boiling point:                              | No data available |
| Flash point:                                | No data available |
| Relative evaporation rate (butylacetate=1): | No data available |
| Flammability (solid, gas):                  | Not flammable     |
| Explosive limits:                           | No data available |
| Explosive properties:                       | No data available |
| Oxidizing properties:                       | No data available |
| Vapor pressure:                             | No data available |
| Relative density:                           | No data available |
| Relative vapor density at 20 °C:            | No data available |
| Solubility:                                 | Water Soluble     |
| Specific gravity:                           | No data available |
| Partition coefficient: n-octanol/water:     | No data available |
| Log Kow:                                    | No data available |
| Auto-ignition temperature:                  | No data available |
| Decomposition temperature:                  | No data available |
| Viscosity:                                  | No data available |
| Viscosity, kinematic:                       | No data available |
| Viscosity, dynamic:                         | No data available |

## **Section 10: Stability and reactivity**

|   |  |
|---|--|
| <b>Stability</b>                          | Stable under normal conditions                             |
| <b>Materials to avoid</b>                 | No dangerous reaction known under conditions of normal use |
| <b>Possibility of hazardous reactions</b> | Unknown  |
| <b>Hazardous decomposition</b>            | Not applicable   |
| <b>Products</b>                           |  |
| <b>Polymerization</b>                     | Hazardous polymerization does not occur                    |
| <b>Conditions to avoid</b>                | Not applicable   |

## **Section 11: Toxicological information**

|                       |          |
|-----------------------|----------|
| <b>Acute Toxicity</b> | Unknown. |
|-----------------------|----------|

## **Section 12: Ecological information**

|                    |         |
|--------------------|---------|
| <b>Ecotoxicity</b> | Unknown |
| <b>Mobility</b>    | Unknown |



|                 |         |
|-----------------|---------|
| Biodegradation  | Unknown |
| Bioaccumulation | Unknown |

### **Section 13: Disposal considerations**

|   |  |
|---|--|
| <b>13.1 Waste treatment Recommendations</b> | This material must be disposed of in accordance with all local, state, provincial and federal regulations. The generation of waste should be avoided or minimized wherever possible. |
|---|--|

### **Section 14: Transport information**

IATA

|                       |   |
|-----------------------|---|
| Proper shipping name: | Not classified as dangerous in the meaning of transport regulations |
| Hazard Class:         | None  |
| Subsidiary Class:     | None  |
| Packing Group:        | None  |
| UN-No:                | None  |

### **Section 15: Regulatory information**

SARA: SARA 302 - No chemicals in this material are subject to the reporting requirements.  
SARA 313 - No chemicals in this material with known CAS #s is subject to the reporting requirements.  
SARA 311/312 Hazards - No SARA Hazards.

California Prop. 65 components: This product does not contain any chemicals known to the state of California to cause cancer, birth defects or other reproductive harm

### **Section 16: Other information**

Other information:                      None.

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## MATERIAL SAFETY DATA SHEET

### Section 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1: Product Identifier

Product Name:

Manual Chromogenic Multiplex IHC Kit

Catalog No.:

CP01M-010

CP02M-010

CP03M-010

Kit Components:

Cell IDx HRP Arrest Solution Part A: Azide in MES

#### 1.2: Product Uses

Immunohistochemistry. For Research Use Only. Not intended for human or animal diagnostic products.

#### 1.3: Company/undertaking Identification

Cell IDx, Inc.

6197 Cornerstone Court E, Ste 102

San Diego, CA 92121

858.452.5800

### Section 2: Hazardous Identification

#### 2.1: Classification of the substance or material

GHS-US Signal Word

**Warning**

GHS-US classification

Acute toxicity (Oral) - Category 2

Acute toxicity (Dermal)- Category 1

Hazardous to the aquatic environment

Acute Hazard Category 3

Hazardous to the aquatic environment

Chronic Hazard Category 3

H312 Harmful in contact with skin

H402 Harmful to aquatic life

H412 Harmful to aquatic life with

long lasting effects

#### 2.2: Label Elements

H312 – Harmful in contact with skin

H402 – Harmful to aquatic life

H412 – Harmful to aquatic life with long lasting effects

#### 2.3: Other Hazards

P273 – Avoid release to the environment

P280 – Wear protective gloves/protective clothing/eye protection/face protection

P302+P352 – If on skin: wash with plenty of water

P312 – Call a poison center or doctor if you feel unwell

P362+P364 – Take off contaminated clothing and wash it before reuse

P501 – Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national, and/or international regulations

### Section 3: Composition/information on ingredients

| Chemical Name | CAS#       | EC#       | Percent |
|---------------|------------|-----------|---------|
| Sodium Azide  | 26628-22-8 | 247-852-1 | 0.656%  |



## **Section 4: First Aid Measures**

|                     |  |
|---------------------|--|
| <b>Skin contact</b> | Immediately wash well with mild soap and copious amounts of water. Remove any contaminating clothing. Flush skin with additional water.  |
| <b>Eye contact</b>  | Immediately flush eyes with copious amounts of water for at least 15 minutes. If symptoms persist, call a physician.   |
| <b>Ingestion</b>    | Flush mouth with copious amounts of water.   |
| <b>Inhalation</b>   | If inhaled, move victim to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen and call physician. If warranted, seek medical attention. If possible, save sample of material that caused reaction for use in determination of appropriate treatment. |

## **Section 5: Firefighting measures**

|  |  |
|--|--|
| <b>Suitable extinguishing media</b>                  | Water spray, dry powder, foam, carbon dioxide  |
| <b>Special protective equipment for firefighters</b> | Do not attempt to take action without suitable protective equipment<br>Self-contained breathing apparatus and complete protective clothing |
| <b>Specific hazards arising from the chemical</b>    | Not applicable   |

## **Section 6: Accidental release measures**

|                                  |  |
|----------------------------------|--|
| <b>Personal precautions</b>      | Always wear recommended Personal Protective Equipment. Use personal protection equipment.  |
| <b>Methods for cleaning up</b>   | Soak up with inert absorbent material.   |
| <b>Environmental precautions</b> | No special environmental precautions required  |
| <b>Other precautions</b>         | Avoid contact and inhalation: do not get in eyes, on skin or clothing. Do not pipet by mouth. Wash contaminated clothing before use. |

## **Section 7: Handling and Storage**

|                 |   |
|-----------------|---|
| <b>Handling</b> | Always wear recommended Personal Protective Equipment. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor. |
| <b>Storage</b>  | 2-8 °C. Keep only in the original container in a cool, well-ventilated place away from metals. Keep container closed when not in use  |

## **Section 8: Exposure controls/personal protection**

### **8.1. Control parameters**

No additional information available.

### **8.2. Exposure controls**

|                                   |  |
|-----------------------------------|--|
| Appropriate engineering controls: | Emergency eye wash stations should be available in vicinity      |
| Ventilation:                      | Ensure good ventilation of the workstation                       |
| Hand protection:                  | Wear suitable gloves.  |
| Eye protection:                   | Safety glasses or goggles are recommended when handling product. |



|                                  |  |
|----------------------------------|--|
| Skin and body protection:        | Wear suitable protective clothing.   |
| Respiratory protection:          | None   |
| Environmental exposure controls: | USA- ACGIH- Occupational Exposure limits:<br>ACGIH Ceiling (mg/m <sup>3</sup> ) – 0.29<br>ACGIH Ceiling (ppm)- 0.11<br>USA- NIOSH- Occupational Exposure Limits:<br>NIOSH REL Ceiling (mg/m <sup>3</sup> ) – 0.3<br>NIOSH REL Ceiling (ppm)- 0.1 |
| Other information:               | Do not eat, smoke or drink where material is handled, processed or stored. Wash hands carefully before eating or smoking. Handle according to established industrial hygiene and safety practices.   |

## Section 9: Physical and chemical properties

### 9.1.Information on basic physical and chemical properties

|   |                          |
|---|--------------------------|
| Physical state:                             | Liquid                   |
| Appearance:                                 | No information available |
| Color:                                      | Colorless                |
| Odor:                                       | No data available        |
| Odor threshold:                             | No data available        |
| pH:   | No data available        |
| Melting point:                              | No data available        |
| Freezing point:                             | No data available        |
| Boiling point:                              | 100 °C                   |
| Flash point:                                | No data available        |
| Relative evaporation rate (butylacetate=1): | No data available        |
| Flammability (solid, gas):                  | Not flammable            |
| Explosive limits:                           | No data available        |
| Explosive properties:                       | No data available        |
| Oxidizing properties:                       | No data available        |
| Vapor pressure:                             | No data available        |
| Relative density:                           | No data available        |
| Relative vapor density at 20 °C:            | No data available        |
| Solubility:                                 | Water Soluble            |
| Specific gravity:                           | 1 g/L                    |
| Partition coefficient: n-octanol/water:     | No data available        |
| Log Kow:                                    | No data available        |
| Auto-ignition temperature:                  | No data available        |
| Decomposition temperature:                  | No data available        |
| Viscosity:                                  | No data available        |
| Viscosity, kinematic:                       | No data available        |
| Viscosity, dynamic:                         | No data available        |

## Section 10: Stability and reactivity

|   |   |
|---|---|
| <b>Stability</b>                          | May form explosive compounds (higher concentrations). |
| <b>Materials to avoid</b>                 | Strong acids, strong oxidizers, copper lead           |
| <b>Possibility of hazardous reactions</b> | Unknown   |
| <b>Hazardous decomposition Products</b>   | Nitrogen oxides.                                      |
| <b>Polymerization</b>                     | Unknown.  |
| <b>Conditions to avoid</b>                | Unknown   |



## Section 11: Toxicological information

**Acute Toxicity** Unknown.

### Potential Health Effects

|            |  |
|------------|--|
| Eyes       | May cause eye irritation with susceptible persons. |
| Skin       | May cause skin irritation in susceptible persons.  |
| Inhalation | May be harmful by inhalation.                      |
| Ingestion  | May be harmful if swallowed.                       |

## Section 12: Ecological information

|                        |   |
|------------------------|---|
| <b>Ecotoxicity</b>     | Harmful to aquatic life with long lasting effects<br>LC50 Fish 1 – 0.8 mg/L |
| <b>Mobility</b>        | Unknown   |
| <b>Biodegradation</b>  | Unknown   |
| <b>Bioaccumulation</b> | Unknown   |

## Section 13: Disposal considerations

**13.1 Waste treatment Recommendations** This material must be disposed of in accordance with all local, state, provincial and federal regulations. The generation of waste should be avoided or minimized wherever possible.

## Section 14: Transport information

|                                    |   |
|------------------------------------|---|
| Department of Transportation (DOT) | In accordance with DOT  |
| Not regulated for transport.       | Not classified as dangerous in the meaning of transport regulations |
| Other information                  | No supplementary information available                              |
| Special transport precautions      | Not applicable  |

## Section 15: Regulatory information

SARA 313 – No chemicals in this material with known CAS #s are subject to the reporting requirements.  
SARA 311/312 Hazards – No SARA Hazards.  
SARA: SARA 302 – Threshold Planning Quantity (TPQ)- 500 lbs.  
CERCLA RQ – 1000 lbs.  
RQ (reportable quantity, section 304 of EPA's List of Lists) – 1000 lbs.

California Prop. 65 components: This product does not contain any chemicals known to the state of California to cause cancer, birth defects or other reproductive harm

## Section 16: Other information

Other information: None.

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Disclaimer: We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind. The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. It is the user's responsibility to satisfy oneself as to the suitability and completeness of this information for the user's own particular use.



## MATERIAL SAFETY DATA SHEET

### Section 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1: Product Identifier

Product Name: Manual Chromogenic Multiplex IHC Kit  
Catalog No.: CP01M-010  
CP02M-010  
CP03M-010  
Kit Components: Cell IDx HRP Arrest Solution Part B: 30% H<sub>2</sub>O<sub>2</sub>

#### 1.2: Product Uses

Immunohistochemistry. For Research Use Only. Not intended for human or animal diagnostic products.

#### 1.3: Company/undertaking Identification

Cell IDx, Inc.  
6197 Cornerstone Court E, Ste 102  
San Diego, CA 92121

858.452.5800

### Section 2: Hazardous Identification

#### 2.1: Classification of the substance or material

GHS-US Signal Word

##### Warning

GHS-US classification

Acute toxicity (Oral) - Category 2  
Acute toxicity (Dermal)- Category 1  
Hazardous to the aquatic environment  
Acute Hazard Category 3  
Hazardous to the aquatic environment  
Chronic Hazard Category 3  
H312 Harmful in contact with skin  
H402 Harmful to aquatic life  
H412 Harmful to aquatic life with long lasting effects

#### 2.2: Label Elements

H312 – Harmful in contact with skin  
H402 – Harmful to aquatic life  
H412 – Harmful to aquatic life with long lasting effects

#### 2.3: Other Hazards

P273 – Avoid release to the environment  
P280 – Wear protective gloves/protective clothing/eye protection/face protection  
P302+P352 – If on skin: wash with plenty of water  
P312 – Call a poison center or doctor if you feel unwell  
P362+P364 – Take off contaminated clothing and wash it before reuse  
P501 – Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national, and/or international regulations

### Section 3: Composition/information on ingredients

| Chemical Name | CAS# | EC# | Percent |
|---------------|------|-----|---------|
|---------------|------|-----|---------|



|                   |           |    |     |
|-------------------|-----------|----|-----|
| Hydrogen Peroxide | 7722-84-1 | NA | 30% |
|-------------------|-----------|----|-----|

#### **Section 4: First Aid Measures**

##### **Skin contact**

Immediately wash well with mild soap and copious amounts of water. Remove any contaminating clothing. Flush skin with additional water.

##### **Eye contact**

Immediately flush eyes with copious amounts of water for at least 15 minutes. If symptoms persist, call a physician.

##### **Ingestion**

Flush mouth with copious amounts of water. Do not swallow water.

##### **Inhalation**

If inhaled, move victim to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen and call physician. If warranted, seek medical attention. If possible, save sample of material that caused reaction for use in determination of appropriate treatment.

#### **Section 5: Firefighting measures**

##### **Suitable extinguishing media**

Water spray, dry powder, foam, carbon dioxide

##### **Special protective equipment for firefighters**

Do not attempt to take action without suitable protective equipment  
Self-contained breathing apparatus and complete protective clothing

##### **Specific hazards arising from the chemical**

Not applicable

#### **Section 6: Accidental release measures**

##### **Personal precautions**

Always wear recommended Personal Protective Equipment. Use personal protection equipment.

##### **Methods for cleaning up**

Soak up with inert absorbent material.

##### **Environmental precautions**

No special environmental precautions required

##### **Other precautions**

Avoid contact and inhalation: do not get in eyes, on skin or clothing. Do not pipet by mouth. Wash contaminated clothing before use.

#### **Section 7: Handling and Storage**

##### **Handling**

Always wear recommended Personal Protective Equipment. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor.

##### **Storage**

2-8 °C. Keep only in the original container in a cool, well-ventilated place away from metals. Keep container closed when not in use

#### **Section 8: Exposure controls/personal protection**

##### **8.1. Control parameters**

No additional information available.

##### **8.2. Exposure controls**

Appropriate engineering controls:

Emergency eye wash stations should be available in vicinity

Ventilation:

Ensure good ventilation of the workstation

Hand protection:

Wear suitable gloves.



|                                  |  |
|----------------------------------|--|
| Eye protection:                  | Safety glasses or goggles are recommended when handling product.   |
| Skin and body protection:        | Wear suitable protective clothing.   |
| Respiratory protection:          | None   |
| Environmental exposure controls: | USA- ACGIH- Occupational Exposure limits:<br>ACGIH Ceiling (mg/m3) – 0.29<br>ACGIH Ceiling (ppm)- 0.11<br>USA- NIOSH- Occupational Exposure Limits:<br>NIOSH REL Ceiling (mg/m3) – 0.3<br>NIOSH REL Ceiling (ppm)- 0.1 |
| Other information:               | Do not eat, smoke or drink where material is handled, processed or stored. Wash hands carefully before eating or smoking. Handle according to established industrial hygiene and safety practices.                     |

## Section 9: Physical and chemical properties

### 9.1.Information on basic physical and chemical properties

|   |                          |
|---|--------------------------|
| Physical state:                             | Liquid                   |
| Appearance:                                 | No information available |
| Color:                                      | Colorless                |
| Odor:                                       | No data available        |
| Odor threshold:                             | No data available        |
| pH:   | No data available        |
| Melting point:                              | No data available        |
| Freezing point:                             | No data available        |
| Boiling point:                              | 100 °C                   |
| Flash point:                                | No data available        |
| Relative evaporation rate (butylacetate=1): | No data available        |
| Flammability (solid, gas):                  | Not flammable            |
| Explosive limits:                           | No data available        |
| Explosive properties:                       | No data available        |
| Oxidizing properties:                       | No data available        |
| Vapor pressure:                             | No data available        |
| Relative density:                           | No data available        |
| Relative vapor density at 20 °C:            | No data available        |
| Solubility:                                 | Water Soluble            |
| Specific gravity:                           | 1 g/L                    |
| Partition coefficient: n-octanol/water:     | No data available        |
| Log Kow:                                    | No data available        |
| Auto-ignition temperature:                  | No data available        |
| Decomposition temperature:                  | No data available        |
| Viscosity:                                  | No data available        |
| Viscosity, kinematic:                       | No data available        |
| Viscosity, dynamic:                         | No data available        |

## Section 10: Stability and reactivity

|   |   |
|---|---|
| <b>Stability</b>                          | May form explosive compounds (higher concentrations). |
| <b>Materials to avoid</b>                 | Strong acids, strong oxidizers, copper lead           |
| <b>Possibility of hazardous reactions</b> | Unknown   |
| <b>Hazardous decomposition Products</b>   | Nitrogen oxides.                                      |
| <b>Polymerization</b>                     | Unknown.  |



**Conditions to avoid** Unknown

## **Section 11: Toxicological information**

**Acute Toxicity** Unknown.

### **Potential Health Effects**

|            |  |
|------------|--|
| Eyes       | May cause eye irritation with susceptible persons. |
| Skin       | May cause skin irritation in susceptible persons.  |
| Inhalation | May be harmful by inhalation.                      |
| Ingestion  | May be harmful if swallowed.                       |

## **Section 12: Ecological information**

**Ecotoxicity** Harmful to aquatic life with long lasting effects  
LC50 Fish 1 – 0.8 mg/L

**Mobility** Unknown

**Biodegradation** Unknown

**Bioaccumulation** Unknown

## **Section 13: Disposal considerations**

**13.1 Waste treatment Recommendations** This material must be disposed of in accordance with all local, state, provincial and federal regulations. The generation of waste should be avoided or minimized wherever possible.

## **Section 14: Transport information**

|                                    |   |
|------------------------------------|---|
| Department of Transportation (DOT) | In accordance with DOT  |
| Not regulated for transport.       | Not classified as dangerous in the meaning of transport regulations |
| Other information                  | No supplementary information available                              |
| Special transport precautions      | Not applicable  |

## **Section 15: Regulatory information**

SARA 313 – No chemicals in this material with known CAS #s are subject to the reporting requirements.

SARA 311/312 Hazards – No SARA Hazards.

SARA: SARA 302 – Threshold Planning Quantity (TPQ)- 500 lbs.

CERCLA RQ – 1000 lbs.

RQ (reportable quantity, section 304 of EPA's List of Lists) – 1000 lbs.

California Prop. 65 components: This product does not contain any chemicals known to the state of California to cause cancer, birth defects or other reproductive harm

## **Section 16: Other information**

**Other information:** None.

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# Material Safety Data Sheet

## SECTION 1: IDENTIFICATION OF THE MIXTURE AND OF THE COMPANY

### 1.1. Product identifier

|                 |  |
|-----------------|--|
| Product Name:   | Manual Chromogenic Multiplex IHC Kit                             |
| Catalog No.:    | CP01M-010<br>CP02M-010<br>CP03M-010                              |
| Kit Components: | Purple Hematoxylin Counterstain<br>Blue Hematoxylin Counterstain |

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended use: Histology Stain, Counterstain for immunohistochemistry

### 1.3. Details of the supplier of the safety data sheet

|                                   |                  |
|-----------------------------------|------------------|
| MANUFACTURER                      | EMAIL ADDRESS:   |
| Cell IDx, Inc.                    | info@cellidx.com |
| 6197 Cornerstone Court E, Ste 102 |                  |
| San Diego, CA 92121               |                  |

### 1.4. Emergency telephone number

9 am-5 pm PST, M-F 858.452.5800

## SECTION 2: HAZARDS IDENTIFICATION

### 2.1. Classification of the mixture

Carc. 1A H350. May cause cancer.

### 2.2. GHS label elements

Danger – GHS08



Hazard-determining components of labeling:  
ethanol

Hazard statements

May cause cancer.

Precautionary statements

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Wear protective gloves/protective clothing/eye protection/face protection.

IF exposed or concerned: Get medical advice/attention.

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

### 2.3. Other hazards which do not result in classification

None

### 2.4. Classification System

NFPA ratings (scale 0 - 4)

Health

1

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|                                    |                 |
|------------------------------------|-----------------|
| Fire                               | 1               |
| Reactivity                         | 0               |
| HMIS-ratings (scale 0 - 4)         |                 |
| Health                             | 1               |
| Fire                               | 1               |
| Reactivity                         | 0               |
| Other hazards                      |                 |
| Results of PBT and vPvB assessment |                 |
| PBT                                | Not applicable. |
| vPvB                               | Not applicable  |

### SECTION 3: COMPOSITION/ INFORMATION ON INGREDIENTS

|                           |  |           |
|---------------------------|--|-----------|
| Chemical characterization | Mixtures   |           |
| Description               | Mixture of the substances listed below with non-hazardous additions. |           |
| Dangerous components      |  |           |
| <b>Cas #</b>              | <b>Description</b>   | <b>%</b>  |
| 57-55-6                   | propane-1,2-diol   | 10-25     |
| 64-17-5                   | ethanol  | 10-25     |
| 64-19-7                   | acetic acid  | ≥0.1-≤2.5 |

### SECTION 4: FIRST AID MEASURES

#### 4.1. Description of first aid measures

##### General Advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

##### If inhaled

If breathed in, move person into fresh air and keep at rest. Get medical attention if any discomfort continues.

If breathing stops, provide artificial respiration. Get medical attention immediately!

##### In case of skin contact

Wash off with soap and plenty of water. Consult a physician if symptoms occur after washing.

##### In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. Continue rinsing eyes during transport to hospital.

##### If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician if any discomfort continues.

#### 4.2. Most important symptoms and effects, both acute and delayed

No further relevant information available.

#### 4.3 Indication of immediate medical attention and special treatment needed, if necessary

No specific first aid measures noted

### SECTION 5: FIREFIGHTING MEASURES

#### 5.1. Extinguishing media

This product is not flammable. Use fire-extinguishing media appropriate for surrounding materials

#### 5.2. Special hazards arising from the substance or mixture

No further relevant information available



### 5.3. Special advice for firefighters

No special measures required

## SECTION 6: ACCIDENTAL RELEASE MEASURES

### 6.1. Personal precautions, protective equipment and emergency procedures

Not required

### 6.2. Environmental precautions

Dilute with plenty of water

Do not allow to enter sewers/surface or ground water

### 6.3. Methods and material for containment and cleaning up

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Dispose contaminated material as waste according to item 13. Ensure adequate ventilation.

### 6.4. Reference to other sections

No dangerous substances are released

### 6.5. Protective Action Criteria for Chemicals.

| Cas #     | Description      | %                       |
|-----------|------------------|-------------------------|
| PAC-1:    |                  |                         |
| 57-55-6   | propane-1,2-diol | 30 mg/m <sup>3</sup>    |
| 64-17-5   | ethanol          | 1,800 ppm               |
| 64-19-7   | acetic acid      | 5 ppm                   |
| 7681-55-2 | sodium iodate    | 0.83 mg/m <sup>3</sup>  |
| PAC-2:    |                  |                         |
| 57-55-6   | propane-1,2-diol | 1,300 mg/m <sup>3</sup> |
| 64-17-5   | ethanol          | 3300* ppm               |
| 64-19-7   | acetic acid      | 35 ppm                  |
| 7681-55-2 | sodium iodate    | 9.1 mg/m <sup>3</sup>   |
| PAC-3:    |                  |                         |
| 57-55-6   | propane-1,2-diol | 7,900 mg/m <sup>3</sup> |
| 64-17-5   | ethanol          | 15000* ppm              |
| 64-19-7   | acetic acid      | 250 ppm                 |
| 7681-55-2 | sodium iodate    | 55 mg/m <sup>3</sup>    |

## SECTION 7: HANDLING AND STORAGE

### 7.1. Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace

### 7.2. Conditions for safe storage, including any incompatibilities

No special requirements

### 7.3. Specific end use(s)

Not required

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters

Components with limited values that require monitoring at the workplace

57-55-6 propane-1,2-diol



|                     |   |
|---------------------|---|
| WEEL                | Long-term value: 10 mg/m <sup>3</sup>               |
| 64-17-5 ethanol     |   |
| PEL                 | Long-term value: 1900 mg/m <sup>3</sup> , 1000 ppm  |
| REL                 | Long-term value: 1900 mg/m <sup>3</sup> , 1000 ppm  |
| TLV                 | Short-term value: 1880 mg/m <sup>3</sup> , 1000 ppm |
| 64-19-7 acetic acid |   |
| PEL                 | Long-term value: 25 mg/m <sup>3</sup> , 10 ppm      |
| REL                 | Short-term value: 37 mg/m <sup>3</sup> , 15 ppm     |
|                     | Long-term value: 25 mg/m <sup>3</sup> , 10 ppm      |
| TLV                 | Short-term value: 37 mg/m <sup>3</sup> , 15 ppm     |
|                     | Long-term value: 25 mg/m <sup>3</sup> , 10 ppm      |

## 8.2. Exposure controls

### General protective and hygienic measures:

Keep away from foodstuffs, beverages, and feed. Wash hands before breaks and at the end of work. Store protective clothing separately.

### Breathing equipment:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

### Protection of hands:

Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

Material of gloves:

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material cannot be calculated in advance and has therefore to be checked prior to the application.

Penetration time of glove material:

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

### Eye protection:

Tightly sealed goggles

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1. Information on basic physical and chemical properties

|                                |   |
|--------------------------------|---|
| Appearance                     | Form: Liquid                                  |
|                                | Color: Purple                                 |
| Odor                           | Like alcohol                                  |
| Odor threshold:                | Not determined.                               |
| pH-value:                      | Not determined.                               |
| Change in condition            |   |
| Melting point/Melting range:   | Undetermined.                                 |
| Boiling point/Boiling range:   | Undetermined.                                 |
| Flash point:                   | Not applicable.                               |
| Flammability (solid, gaseous): | Not applicable.                               |
| Ignition temperature:          | 371 °C (699.8 °F)                             |
| Decomposition temperature:     | Not determined.                               |
| Auto igniting:                 | Product is not self igniting.                 |
| Danger of explosion:           | Product does not present an explosion hazard. |



Explosion limits:

Lower: 2.6 Vol %

Upper: 15 Vol %

Vapor pressure at 20 °C (68 °F): 59 hPa (44.3 mm Hg)

Density: Not determined.

Relative density: Not determined.

Vapor density: Not determined.

Evaporation rate: Not determined.

Solubility in / Miscibility with

Water: Fully miscible.

Partition coefficient (n-octanol/water): Not determined.

Dynamic: Not determined.

Kinematic: Not determined.

Other information: No further relevant information available.

## 9.2. Other information

None

## SECTION 10: STABILITY AND REACTIVITY

### 10.1. Reactivity

No data available

### 10.2. Chemical stability

Stable under normal temperature conditions

### 10.3. Possibility of hazardous reactions

No data available

### 10.4. Conditions to avoid

No further relevant information available

### 10.5. Incompatible materials

No further relevant information available

### 10.6. Hazardous decomposition products

None under normal conditions

## SECTION 11: TOXICOLOGICAL INFORMATION

### 11.1. Information on toxicological effects

Acute toxicity:

Primary irritant effect:

On the skin: No irritant effect.

On the eye: No irritating effect.

Sensitization: No sensitizing effects known.

Additional toxicological information:

The product shows the following dangers according to internally approved calculation methods for preparations:

Carcinogenic categories

IARC (International Agency for Research on Cancer)

64-17-5

ethanol



NTP (National Toxicology Program)

None of the ingredients are listed.

OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients are listed.

## **SECTION 12: ECOLOGICAL INFORMATION**

### **12.1. Toxicity**

No further relevant information available

### **12.2. Persistence and degradability**

No further relevant information available

### **12.3. Bio accumulative potential**

No further relevant information available

### **12.4. Mobility in soil**

No further relevant information available

### **12.5. Results of PBT and vPvB assessment**

Not applicable

### **12.6. Other adverse effects**

Slightly hazardous for water. Do not allow undiluted product or large quantities of it to reach ground water, water course, or sewage system

## **SECTION 13: DISPOSAL CONSIDERATIONS**

### **General information**

When handling waste, consideration should be made to the safety precautions applying to handling of the product

### **13.1. Waste treatment methods**

Uncleaned packaging

Recommendation: Disposal must be made according to official regulations

Recommended cleansing agent: Water, if necessary with cleansing agent

## **SECTION 14: TRANSPORTATION INFORMATION**

### **14.1. UN number/UN Proper Shipping Name**

Not applicable.

### **14.2. DOT (US)**

Not dangerous good

### **14.3. Transport hazard class(es)**

Not dangerous goods.

### **14.4. Packing group**

Not applicable

### **14.5. Environmental hazards**

Environmentally Hazardous Substance/Marine Pollutants

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No

#### 14.6. Special precautions for user

None

#### 14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable

### SECTION 15: REGULATORY INFORMATION

#### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

SARA

|   |   |
|---|---|
| Section 355 (extremely hazardous substances):   |   |
| None of the ingredients are listed.             |   |
| Section 313 (Specific toxic chemical listings): |   |
| None of the ingredients is listed.              |   |
| TSCA (Toxic Substances Control Act):            |   |
| 57-55-6   | propane-1,2-diol                                    |
| 64-17-5   | ethanol   |
| 64-19-7   | acetic acid   |
| 517-28-2  | hematoxylin   |
| 7681-55-  | sodium iodate                                       |
| 7732-18-  | water, distilled, conductivity or of similar purity |

TSCA new (21st Century Act) (Substances not listed)

Proposition 65

|   |         |
|---|---------|
| Chemicals known to cause cancer:                            |         |
| None of the ingredients is listed.                          |         |
| Chemicals known to cause reproductive toxicity for females: |         |
| None of the ingredients are listed.                         |         |
| Chemicals known to cause reproductive toxicity for males:   |         |
| None of the ingredients are listed.                         |         |
| Chemicals known to cause developmental toxicity:            |         |
| 64-17-5   | ethanol |

Carcinogenic categories

|  |            |
|--|------------|
| EPA (Environmental Protection Agency)                            |            |
| None of the ingredients are listed.                              |            |
| TLV (Threshold Limit Value established by ACGIH)                 |            |
| 64-17-5  | ethanol A3 |
| NIOSH-Ca (National Institute for Occupational Safety and Health) |            |
| None of the ingredients are listed.                              |            |

### SECTION 16: OTHER INFORMATION

#### Disclaimer

This information contained herein is believed to be accurate but is not warranted to be so. Data and calculations are based on information furnished by the manufacturer of the product and manufacturers of the components of the product. Users are advised to confirm in advance of need that information is current,  
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applicable and suited to the circumstances of use. Vendor assumes no responsibility for injury to vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Furthermore, vendor assumes no responsibility for injury caused by abnormal use of the material even if reasonable safety procedures are followed. Any questions regarding this product should be directed to the manufacturer of the product as described in Section 1.