

# Cell Palette DAB HRP Chromogen Kit

## Material Safety Data Sheet

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

#### 1.1 Product identifier

Product:	Cell Palette DAB HRP Chromogen Kit
Catalog No.:	CPHD-050 CPHD-200
Kit Component:	DAB Chromogen (50x)

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

Recommended use:	Immunohistochemistry (IHC)
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#### 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.
	H350	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
Classification (EC 1272/2008)	Classification (67/548/EEC)
Muta. 2 - H341	Muta. Cat. 3;R68
Carc. 1B - H350	Carc. Cat. 2;R45

ETHYLENE GLYCOL	<80%
CAS-No.: 107-21-1	EC No.: 203-473-3
Classification (EC 1272/2008)	Classification (67/548/EEC)
Not classified	[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 vapours 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 vapours/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 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 Colour: Light brown/purple
Odour	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
Vapour density (air=1)	Not determined
Vapour 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 (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

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 Polymerisation 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. Bioaccumulative potential**

Bioaccumulative potential  
No data available on bioaccumulation. The product does not contain any substances expected to be bioaccumulating.  
Partition coefficient Not determined

**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

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, Authorisation 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.



# Cell Palette DAB HRP Buffer

## Material Safety Data Sheet

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

#### 1.1. Product identifier

Product: Cell DAB HRP Chromogen Kit  
Catalog No.: CPHD-050  
CPHD-200  
Kit Component: HRP-DAB 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: 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 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

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

None

### SECTION 3: COMPOSITION/ INFORMATION ON INGREDIENTS

#### 3.1. Substance

Not applicable

#### 3.2. Mixture

Name	Product Identifier	%	GHS US classification
Water	(CAS-No.) 7732-18-5	99.1	Not classified

Full text of H-phrases: see Section 16

### SECTION 4: FIRST AID MEASURES

#### 4.1. Description of first aid measures

##### General Advice

First Aid measure are not required for this product. If you feel unwell, seek medical advice.

**If inhaled**

Not required.

**In case of skin contact**

Not required.

**In case of eye contact**

Not required.

**If swallowed**

Not required. If unwell, seek medical advice.

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

Not expected under normal conditions.

**Ingestion**

Not expected under normal conditions.

**Skin Contact**

Not expected under normal conditions.

**Eye Contact**

Not expected under normal conditions.

**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 nor explosive. 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**

Use protective gloves, goggles and suitable protective clothing. For personal protection, see section 8.

**6.2. Environmental precautions**

None known.

**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.

**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**

Handle in accordance with good industrial hygiene and safety procedures.

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

Keep in original container. Store in a dry, cool, and well-ventilated place. Keep container closed when not in use.

Incompatible Materials: Water-reactive materials

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

Immunohistochemistry reagent intended for use by professional laboratory personnel that have been properly trained in its use





**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	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	Not determined
Ingestion	Not determined
Skin contact	Not determined
Eye contact	Not determined
Health Warnings	Not determined

**SECTION 12: ECOLOGICAL INFORMATION**

**12.1. Toxicity**

Not classified

**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**

Not determined

**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, regional, national, and international 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

**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**

US Federal Regulations

DAB Buffer and Water (CAS 7732-18-5) are listed on the United States TSCA, Toxic Substances Control Act, inventory.

US State Regulations

This product and its chemical components do not appear on any US state list, or its chemical components are not required to be disclosed.

**15.2. Chemical Safety Assessment**

No chemical safety assessment has been carried out.

**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.