



Cell Palette Yellow HRP Chromogen Kit

Material Safety Data Sheet

SECTION 1: IDENTIFICATION OF THE MIXTURE AND OF THE COMPANY

1.1 Product identifier

Product: Cell Palette Yellow HRP Chromogen Kit
Catalog No.: CPHY-050
CPHY-200
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: Cell IDx, Inc.
6197 Cornerstone Court E, Ste 102
San Diego, CA 92121
EMAIL ADDRESS: support@cellidx.com

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
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/m³ UK - 15 min. STEL: 125 mg/m³

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)	No Data Available
Vapour pressure	No Data Available
Evaporation rate	No Data Available
Viscosity	No Data Available
Solubility Value (G/100G H ₂ 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. 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

Risk Phrases In Full

R22

R45

R68

Hazard Statements In Full

H350

H341

Only trained personnel should use this material.

Harmful if swallowed

May cause cancer.

Possible risk of irreversible effects.

May cause cancer.

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 Yellow HRP Buffer

Material Safety Data Sheet

SECTION 1: IDENTIFICATION OF THE MIXTURE AND OF THE COMPANY

1.1. Product identifier

Product: Cell Palette Yellow HRP Chromogen Kit
Catalog No.: CPHY-050
CPHY-200
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: 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

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)
Eye Irrit. 2 – H319

Classification (67/548/EEC)
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/m³ UK - 15 min. STEL: 2.8 mg/m³

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



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

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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

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