CELL SIGNALING TECHNOLOGY MATERIAL SAFETY DATA SHEET -KIT December 2011

1. PRODUCT IDENTIFICATION

Product Name: SignalKine™ Sandwich ELISA Kit

Product catalog #: 7289

Product Use: This product is intended for Research Use Only (RUO).

It is not intended for clinical diagnostic or therapeutic use in humans or animals.

Manufacturer/Supplier: Cell Signaling Technology

3 Trask Lane Danvers, MA 01923

Janvers, IVIA 0 192

USA

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3. HAZARDS IDENTIFICATION

- ✓ ELISA Wash Buffer (CST#9801)
- ✓ TMB (CST#7004)
- ✓ STOP Solution (CST#7002)
- ✓ Assay Diluent 1
- ✓ Serum Diluent 1
- ✓ Detection Antibody Diluent
- ✓ HRP-linked Streptavidin (lyophilized) 100X
- ✓ HRP Diluent

Based on percentages of hazardous ingredients in all other kit components in this product, this product is not classified as "dangerous" under EU Directives 67/548/EEC or hazardous under US OSHA Hazard Communications regulations 29 CFR 1910.1200.

3. COMPOSITION/INFORMATION

Preparation Name: SignalKine™ Sandwich ELISA Kit

CAS#: N/A

4. FIRST AID MEASURES

Inhalation: Remove to fresh air. If breathing is difficult, get medical attention.

Ingestion: If person is conscious, wash out mouth with water. Get medical attention.

Skin Exposure: Wash skin with soap and water. If irritation develops or persists, get medical attention.

Eye Exposure: Immediately flush eyes water for at least 15 minutes. Get medical attention.

5. FIRE FIGHTING MEASURES

Flash Point: Not applicable

Autoignition Temperature: Not applicable

Explosion: Not applicable

Fire extinguishing media: water spray, dry chemical, foam, or carbon dioxide.

Firefighting: wear protective clothing and self-contained breathing apparatus to prevent contact with skin and eyes.

Specific Hazard: none

6. ACCIDENTAL RELEASE MEASURES

Wear appropriate personal protective equipment. Absorb liquid with an absorbent material. Transfer contaminated absorbent to a closed chemical waste container for disposal. Wash spill site after material has been picked up for disposal.

7. HANDLING AND STORAGE

Storage: Store kit in tightly closed container at 4C.

8-13. Refer to individual MSDS for kit components for Sections 8-13 information: Exposure Controls/Personal Protection, Physical and Chemical Properties, Stability and Reactivity, Toxicological Information, Ecological information, Disposal Considerations.

14. TRANSPORT INFORMATION

D.O.T.

Proper Shipping Name: None

This substance is considered non-hazardous for transport.

IATA

Proper Shipping Name: None

This substance is considered non-hazardous for air transport.

15. REGULATORY INFORMATION:

EU: Not classified OSHA: Not listed

Canadian DSL: Not Listed SARA 302, 313 Not Listed. SARA 311/312: Not Listed.

Massachusetts Right To Know: Not Listed. Pennsylvania Right To Know: Not Listed. New Jersey Right To Know: Not Listed.

California Prop. 65: Not Listed

16. OTHER INFORMATION

December 22, 2011

1. PRODUCT IDENTIFICATION

Product Name: Assay Diluent 1 Product catalog #: 7289 Kit component

Substance/Preparation: Preparation

Identified Use: This product is for in vivo laboratory research use only (RUO).

It is not intended for clinical diagnostic or therapeutic use in humans or animals.

Supplier: Cell Signaling Technology

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2. COMPOSITION/INFORMATION on hazardous ingredients

According to 29CFR 1910.1200(d), mixtures with hazardous ingredients at less than 1% and carcinogens at less than 0.1% are considered non-hazardous.

Ingredient:CAS#% VolumeTween 209005-64-50.5%Non hazardous Phosphate Buffered Saline, 5XN/A99.5%

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

OSHA: Non-hazardous

EU: This product is not classified according to Directive 1999/45/EC.

Appearance: Colorless liquid Possible routes of exposure:

Eye/Skin Contact: May cause irritation to eyes, skin.

Ingestion: May cause gastrointestinal tract irritation.

Inhalation: May cause respiratory tract irritation.

4. FIRST AID MEASURES

Inhalation: If inhaled, remove to fresh air. If breathing is difficult, get medical attention.

Ingestion: If swallowed, wash out mouth with water provided person is conscious. Get medical attention or

Call Poison Control Center for most current information.

Skin Exposure: In case of contact, immediately wash skin with soap and water for at least 15 minutes.

Remove contaminated clothing. Wash clothing before reuse.

Eye Exposure: In case of contact with eyes, immediately flush eyes water for at least 15 minutes.

Get medical attention.

5. FIRE FIGHTING MEASURES

Flash Point: Not Flammable.

Autoignition Temperature: Not considered to be a fire hazard.

Explosion: Not applicable.

Fire extinguishing media: water spray, dry chemical, alcohol foam, or carbon dioxide.

Firefighting: wear protective clothing and self-contained breathing apparatus to prevent contact with skin and eyes.

6. ACCIDENTAL RELEASE MEASURES:

Wear appropriate personal protective equipment. Avoid contact with spilled material. Avoid breathing vapor or mist. Provide adequate ventilation.

7. HANDLING AND STORAGE

Store in tightly closed container at 4'C. Keep and use in a well-ventilated area. Avoid contact with eyes, skin, and clothing. Wash hands thoroughly after handling.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ventilation System: a system of local and/or general exhaust is recommended.

Skin Protection: wear compatible chemical resistant gloves and protective clothing, such as a lab coat.

Eye protection: wear protective safety glasses or chemical safety goggles. Maintain eye wash fountain and quick-drench facilities in work area.

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9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: colorless liquid
Odor: no data available
pH: no data available
Melting Point: no data available
Boiling Point no data available

Flash Point Not considered to be a fire hazard.

Explosive properties Not considered to be an explosion hazard.

10. STABILITY AND REACTIVITY

Stability: Stable under normal conditions.

Hazardous Polymerization: no data available Hazardous Decomposition: no data available Conditions to avoid: no data available

11. TOXICOLOGICAL INFORMATION

Acute Toxicity no data available Chronic Toxicity no data available

Routes of Exposure:

Skin Exposure: May be harmful if absorbed through skin.

Eye Exposure: May cause eye irritation. Inhalation: May be harmful if inhaled. Ingestion: May be harmful if swallowed.

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

12. ECOLOGICAL INFORMATION

No data available

13. DISPOSAL CONSIDERATIONS

Dispose of in accordance with federal, state, local environmental regulations-

14. TRANSPORT INFORMATION

D.O.T.

Proper Shipping Name: None

This substance is considered non-hazardous for transport.

IATA

Proper Shipping Name: None

This substance is considered non-hazardous for air transport.

15. REGULATORY INFORMATION

OSHA: Not classified as hazardous. EU: Not classified as dangerous. Canadian DSL: Not Listed SARA 302, 313 Not Listed. SARA 311/312: Not Listed. Massachusetts Right To Know: Not Listed.

Pennsylvania Right To Know: Not Listed. New Jersey Right To Know: Not Listed.

California Prop. 65: Not Listed

16. OTHER INFORMATION

This compound is sold only for *in vitro* laboratory research use only. It is not for use in humans. It is not intended for use as diagnostic or clinical therapeutic. To the best of our knowledge, this document is accurate. It is intended to serve as a guide for safe use of this product in a laboratory setting by experienced personnel. The burden of safe use of this material rests entirely with the user. Cell Signaling Technology, Inc., shall not be held liable for any damage resulting from the handling of or from contact with the above product.

1. PRODUCT IDENTIFICATION

Product Name: ELISA Wash Buffer (20X)
Product catalog #: #7289 Kit component

CAS# N/A

Product Use: This product is intended for Research Use Only (RUO). It is not intended for clinical

diagnostic or therapeutic use in humans or animals.

Manufacturer/Supplier: Cell Signaling Technology

3 Trask Lane Danvers, MA 01923

USA

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2. HAZARDS IDENTIFICATION

OSHA regulatory status:

This material is considered non-hazardous according to OSHA Hazard Communication Standard (29 CFR 1910.1200).

EU regulatory Status:

Not a hazardous mixture according to Regulation (EC) No. 1272/2008.

Not a hazardous mixture according to EC Directives 67/548/EEC or 1999/45/EC.

3. COMPOSITION/INFORMATION

Ingredient	Percent	CAS#
Tween 20 Kathon Non-hazardous 20X phosphate buffered saline	1% 0.5% 98.5%	9005-64-5 55965-84-9 none

4. FIRST AID MEASURES

Inhalation: Remove to fresh air. If breathing is difficult, get medical attention.

Ingestion: If person is conscious, wash out mouth with water. Get medical attention.

Skin Exposure: Wash skin with soap and water. Eye Exposure: Flush eyes water as a precaution.

5. FIRE FIGHTING MEASURES

Flammability: Not flammable.

Fire extinguishing media: water spray, dry chemical, foam, or carbon dioxide.

Firefighting: wear protective clothing and self-contained breathing apparatus to prevent contact with skin and eyes.

Specific Hazard: none known

6. ACCIDENTAL RELEASE MEASURES

Use appropriate personal protective equipment. Absorb liquid with an absorbent material. Wash spill site after material has been picked up for disposal.

7. HANDLING AND STORAGE

Ensure adequate ventilation. Handle in accordance with good industrial hygiene and safety practice. Keep container tightly closed. Recommended storage temperature 4'C.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines: This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Engineering Measures: showers, eyewash, ventilation systems. Hygiene Measures: wear suitable gloves and eye/face protection.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: colorless liquid Odor: data not available data not available pH: Boiling Point: data not available Melting Point: data not available Freezing Point: data not available Volatile Organic Compounds (VOC): data not available Autoignition temp. data not available Solubility: water soluble

10. STABILITY AND REACTIVITY

Stability: no data available.
Conditions/materials to avoid: no data available
Hazardous Decomposition: no data available
Hazardous polymerization: no data available.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity no data available Chronic Toxicity no data available

Routes of Exposure:

Skin Exposure: May be harmful if absorbed through skin.

Eye Exposure: May cause eye irritation. Inhalation: May be harmful if inhaled. Ingestion: May be harmful if swallowed.

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

12. ECOLOGICAL INFORMATION

No data available

13. DISPOSAL CONSIDERATIONS

Dispose of in accordance with federal, state and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material.

14. TRANSPORT INFORMATION

D.O.T.

Proper Shipping Name: None

This substance is considered non-hazardous for transport.

IATA

Proper Shipping Name: None

This substance is considered non-hazardous for air transport.

15. REGULATORY INFORMATION

OSHA: Not classified as hazardous. EU: Not classified as dangerous. Canadian DSL: Not Listed SARA 302, 313 Not Listed. SARA 311/312: Not Listed. Massachusetts Right To Know: Not Listed.

Massachusetts Right To Know: Not Listed. Pennsylvania Right To Know: Not Listed. New Jersey Right To Know: Not Listed.

California Prop. 65: Not Listed

16. OTHER INFORMATION

1. PRODUCT IDENTIFICATION

Product Name: Assay Diluent 1
Product catalog #: #7289 Kit component

CAS# N/A

Product Use: This product is intended for Research Use Only (RUO). It is not intended for clinical

diagnostic or therapeutic use in humans or animals.

Manufacturer/Supplier: Cell Signaling Technology

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2. HAZARDS IDENTIFICATION

OSHA regulatory status:

This material is considered non-hazardous according to OSHA Hazard Communication Standard (29 CFR 1910.1200).

EU regulatory Status:

Not a hazardous mixture according to Regulation (EC) No. 1272/2008.

Not a hazardous mixture according to EC Directives 67/548/EEC or 1999/45/EC.

3. COMPOSITION/INFORMATION

Ingredient	Percent	CAS#
Fetal Bovie Serum	99.95%	9014-81-7
Sodium azide	0.05%	26628-22-8

4. FIRST AID MEASURES

Inhalation: Remove to fresh air. If breathing is difficult, get medical attention.

Ingestion: If person is conscious, wash out mouth with water. Get medical attention.

Skin Exposure: Wash skin with soap and water. **Eye Exposure**: Flush eyes water as a precaution.

5. FIRE FIGHTING MEASURES

Flammability: Not flammable.

Fire extinguishing media: water spray, dry chemical, foam, or carbon dioxide.

Firefighting: wear protective clothing and self-contained breathing apparatus to prevent contact with skin and eyes.

Specific Hazard: none known

6. ACCIDENTAL RELEASE MEASURES

Use appropriate personal protective equipment. Absorb liquid with an absorbent material. Wash spill site after material has been picked up for disposal.

7. HANDLING AND STORAGE

Ensure adequate ventilation. Handle in accordance with good industrial hygiene and safety practice. Keep container tightly closed. Recommended storage temperature 4"C.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines: This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Engineering Measures: showers, eyewash, ventilation systems. Hygiene Measures: wear suitable gloves and eye/face protection.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: colorless liquid Odor: data not available

7.2-7.4 pH:

Boiling Point: data not available Melting Point: data not available Freezing Point: data not available Volatile Organic Compounds (VOC): data not available Autoignition temp. data not available Solubility: water soluble

10. STABILITY AND REACTIVITY

Stability: no data available. Conditions/materials to avoid: no data available **Hazardous Decomposition:** no data available **Hazardous polymerization:** no data available.

11. TOXICOLOGICAL INFORMATION

no data available **Acute Toxicity Chronic Toxicity** no data available

Routes of Exposure:

Skin Exposure: May be harmful if absorbed through skin.

Eye Exposure: May cause eye irritation. Inhalation: May be harmful if inhaled. Ingestion: May be harmful if swallowed.

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

12. ECOLOGICAL INFORMATION

No data available

13. DISPOSAL CONSIDERATIONS

Dispose of in accordance with federal, state and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material.

14. TRANSPORT INFORMATION

D.O.T.

Proper Shipping Name: None

This substance is considered non-hazardous for transport.

IATA

Proper Shipping Name: None

This substance is considered non-hazardous for air transport.

15. REGULATORY INFORMATION

OSHA: No known hazards

EU: not classified. Canadian DSL: Not Listed SARA 302, 313 Not Listed. SARA 311/312: Not Listed.

Massachusetts Right To Know: Not Listed. Pennsylvania Right To Know: Not Listed. New Jersey Right To Know: Not Listed.

California Prop. 65: Not Listed

16. OTHER INFORMATION

CELL SIGNALING TECHNOLOGY MATERIAL SAFETY DATA SHEET December 22, 2011

1. PRODUCT IDENTIFICATION

Product Name: Serum Diluent 1
Product catalog #: 7982 kit component

CAS# N/A

Product Use: This product is intended for Research Use Only (RUO).

It is not intended for clinical diagnostic or therapeutic use in humans or animals.

Manufacturer/Supplier: Cell Signaling Technology

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2. HAZARDS IDENTIFICATION

OSHA regulatory status:

This material is considered non-hazardous according to OSHA Hazard Communication Standard (29 CFR 1910.1200).

EU regulatory Status:

Not a hazardous mixture according to Regulation (EC) No. 1272/2008.

Not a hazardous mixture according to EC Directives 67/548/EEC or 1999/45/EC.

3. COMPOSITION/INFORMATION

Ingredient	Percent	CAS#
Fetal Bovie Serum	99.95%	9014-81-7
Sodium azide	0.05%	26628-22-8

4. FIRST AID MEASURES

Inhalation: Remove to fresh air. If breathing is difficult, get medical attention.

Ingestion: If person is conscious, wash out mouth with water. Get medical attention.

Skin Exposure: Wash skin with soap and water. **Eye Exposure:** Flush eyes water as a precaution.

5. FIRE FIGHTING MEASURES

Flammability: Not flammable.

Fire extinguishing media: water spray, dry chemical, foam, or carbon dioxide.

Firefighting: wear protective clothing and self-contained breathing apparatus to prevent contact with skin and eyes.

Specific Hazard: none known

6. ACCIDENTAL RELEASE MEASURES

Use appropriate personal protective equipment. Absorb liquid with an absorbent material. Wash spill site after material has been picked up for disposal.

7. HANDLING AND STORAGE

Ensure adequate ventilation. Handle in accordance with good industrial hygiene and safety practice. Keep container tightly closed. Recommended storage temperature 4"C.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines: This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Engineering Measures: showers, eyewash, ventilation systems. Hygiene Measures: wear suitable gloves and eye/face protection.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: colorless liquid data not available

pH: 7.2-7.4

Boiling Point:

Melting Point:

Greezing Point:

Volatile Organic Compounds (VOC):

Autoignition temp.

Solubility:

data not available data not available data not available water soluble

10. STABILITY AND REACTIVITY

Stability: no data available.
Conditions/materials to avoid: no data available
Hazardous Decomposition: no data available
Hazardous polymerization: no data available.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity no data available Chronic Toxicity no data available

Routes of Exposure:

Skin Exposure: May be harmful if absorbed through skin.

Eye Exposure: May cause eye irritation. Inhalation: May be harmful if inhaled. Ingestion: May be harmful if swallowed.

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

12. ECOLOGICAL INFORMATION

No data available

13. DISPOSAL CONSIDERATIONS

Dispose of in accordance with federal, state and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material.

14. TRANSPORT INFORMATION

D.O.T.

Proper Shipping Name: None

This substance is considered non-hazardous for transport.

IATA

Proper Shipping Name: None

This substance is considered non-hazardous for air transport.

15. REGULATORY INFORMATION

OSHA: No known hazards

EU: not classified.

Canadian DSL: Not Listed SARA 302, 313 Not Listed. SARA 311/312: Not Listed.

Massachusetts Right To Know: Not Listed. Pennsylvania Right To Know: Not Listed. New Jersey Right To Know: Not Listed.

California Prop. 65: Not Listed

16. OTHER INFORMATION

1. PRODUCT IDENTIFICATION

Product Name: Detection Antibody Diluent Product catalog #: 7289 kit component

CAS# N/A

Product Type: Preparation

Product Use: This product is intended for Research Use Only (RUO).

It is not intended for clinical diagnostic or therapeutic use in humans or animals.

Manufacturer/Supplier: Cell Signaling Technology

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USA

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2. HAZARDS IDENTIFICATION

OSHA regulatory status:

This material is considered non-hazardous according to OSHA Hazard Communication Standard (29 CFR 1910.1200).

EU regulatory Status:

Not a hazardous mixture according to Regulation (EC) No. 1272/2008.

Not a hazardous mixture according to EC Directives 67/548/EEC or 1999/45/EC.

3. COMPOSITION/INFORMATION

Ingredient	Percent	CAS#
Bovine Serum Albumin	2%	9048-46-8
Fetal Bovine Serum	25%	N/A
Tween 20	0.1%	9005-64-5
Kathon	0.05%	55965-84-9

4. FIRST AID MEASURES

Inhalation: Remove to fresh air. If breathing is difficult, get medical attention.

Ingestion: If person is conscious, wash out mouth with water. Get medical attention.

Skin Exposure: Wash skin with soap and water. **Eye Exposure:** Flush eyes water as a precaution.

5. FIRE FIGHTING MEASURES

Flammability: Not flammable.

Fire extinguishing media: water spray, dry chemical, foam, or carbon dioxide.

Firefighting: wear protective clothing and self-contained breathing apparatus to prevent contact with skin and eyes.

Specific Hazard: none known

6. ACCIDENTAL RELEASE MEASURES

Use appropriate personal protective equipment. Absorb liquid with an absorbent material. Wash spill site after material has been picked up for disposal.

7. HANDLING AND STORAGE

Ensure adequate ventilation. Handle in accordance with good industrial hygiene and safety practice. Keep container tightly closed. Recommended storage temperature 4'C.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines: This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Engineering Measures: showers, eyewash, ventilation systems. **Hygiene Measures:** wear suitable gloves and eye/face protection.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: green liquid Odor: data not available data not available pH: Boiling Point: data not available Melting Point: data not available Freezing Point: data not available Volatile Organic Compounds (VOC): data not available Autoignition temp. data not available Solubility: water soluble

10. STABILITY AND REACTIVITY

Stability: no data available.
Conditions/materials to avoid: no data available
Hazardous Decomposition: no data available
Hazardous polymerization: no data available.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity no data available Chronic Toxicity no data available

Routes of Exposure:

Skin Exposure: May be harmful if absorbed through skin.

Eye Exposure: May cause eye irritation. Inhalation: May be harmful if inhaled. Ingestion: May be harmful if swallowed.

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

12. ECOLOGICAL INFORMATION

No data available

13. DISPOSAL CONSIDERATIONS

Dispose of in accordance with federal, state and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material.

14. TRANSPORT INFORMATION

D.O.T.

Proper Shipping Name: None

This substance is considered non-hazardous for transport.

IATA

Proper Shipping Name: None

This substance is considered non-hazardous for air transport.

15. REGULATORY INFORMATION

OSHA: Not classified as hazardous. EU: Not classified as dangerous. Canadian DSL: Not Listed SARA 302, 313 Not Listed. SARA 311/312: Not Listed.

Massachusetts Right To Know: Not Listed. Pennsylvania Right To Know: Not Listed. New Jersey Right To Know: Not Listed.

California Prop. 65: Not Listed

16. OTHER INFORMATION

1. PRODUCT IDENTIFICATION

Product Name: HRP-Linked Streptavidin (lyophilized) 100X

Product catalog #: #7289 Kit component

CAS# N/A

Product Use: This product is intended for Research Use Only (RUO). It is not intended for clinical

diagnostic or therapeutic use in humans or animals.

Manufacturer/Supplier: Cell Signaling Technology

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USA

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2. HAZARDS IDENTIFICATION

OSHA regulatory status:

This material is considered non-hazardous according to OSHA Hazard Communication Standard (29 CFR 1910.1200).

EU regulatory Status:

Not a hazardous mixture according to Regulation (EC) No. 1272/2008.

Not a hazardous mixture according to EC Directives 67/548/EEC or 1999/45/EC.

3. COMPOSITION/INFORMATION

Ingredient	Percent	CAS#
Trehalose Non-hazardous Phosphate Buffered Saline	5% 95%	6138-23-4 N/A

4. FIRST AID MEASURES

Inhalation: Remove to fresh air. If breathing is difficult, get medical attention.

Ingestion: If person is conscious, wash out mouth with water. Get medical attention.

Skin Exposure: Wash skin with soap and water. **Eye Exposure**: Flush eyes water as a precaution.

5. FIRE FIGHTING MEASURES

Flammability: Not flammable.

Fire extinguishing media: water spray, dry chemical, foam, or carbon dioxide.

Firefighting: wear protective clothing and self-contained breathing apparatus to prevent contact with skin and eyes.

Specific Hazard: none known

6. ACCIDENTAL RELEASE MEASURES

Use appropriate personal protective equipment. Absorb liquid with an absorbent material. Wash spill site after material has been picked up for disposal.

7. HANDLING AND STORAGE

Ensure adequate ventilation. Handle in accordance with good industrial hygiene and safety practice. Keep container tightly closed. Recommended storage temperature 4'C.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines: This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Engineering Measures: showers, eyewash, ventilation systems. Hygiene Measures: wear suitable gloves and eye/face protection.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: lyophilized powder Odor: data not available data not available pH: **Boiling Point:** data not available Melting Point: data not available Freezing Point: data not available Volatile Organic Compounds (VOC): data not available data not available

Autoignition temp. Solubility: water soluble

10. STABILITY AND REACTIVITY

Stability: no data available. Conditions/materials to avoid: no data available **Hazardous Decomposition:** no data available **Hazardous polymerization:** no data available.

11. TOXICOLOGICAL INFORMATION

no data available **Acute Toxicity Chronic Toxicity** no data available

Routes of Exposure:

Skin Exposure: May be harmful if absorbed through skin.

Eye Exposure: May cause eye irritation. Inhalation: May be harmful if inhaled. Ingestion: May be harmful if swallowed.

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

investigated.

12. ECOLOGICAL INFORMATION

No data available

13. DISPOSAL CONSIDERATIONS

Dispose of in accordance with federal, state and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material.

14. TRANSPORT INFORMATION

D.O.T.

Proper Shipping Name: None

This substance is considered non-hazardous for transport.

IATA

Proper Shipping Name: None

This substance is considered non-hazardous for air transport.

15. REGULATORY INFORMATION

OSHA: Not classified as hazardous.

EU: Not classified as dangerous. Canadian DSL: Not Listed SARA 302, 313 Not Listed. SARA 311/312: Not Listed.

Massachusetts Right To Know: Not Listed. Pennsylvania Right To Know: Not Listed. New Jersey Right To Know: Not Listed.

California Prop. 65: Not Listed

16. OTHER INFORMATION

1. PRODUCT IDENTIFICATION

Product Name: HRP Diluent

Product catalog #: #7289 Kit component

CAS# N/A

Product Type: Preparation

Product Use: This product is intended for Research Use Only (RUO). It is not intended for clinical

diagnostic or therapeutic use in humans or animals.

Manufacturer/Supplier: Cell Signaling Technology

3 Trask Lane Danvers, MA 01923

USA

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2. HAZARDS IDENTIFICATION

OSHA regulatory status:

This material is considered non-hazardous according to OSHA Hazard Communication Standard (29 CFR 1910.1200).

EU regulatory Status:

Not a hazardous mixture according to Regulation (EC) No. 1272/2008.

Not a hazardous mixture according to EC Directives 67/548/EEC or 1999/45/EC.

3. COMPOSITION/INFORMATION

Ingredient	Percent	CAS#
Bovine Serum Albumin	2%	9048-46-8
Fetal Bovine Serum	25%	N/A
Tween 20	0.1%	9005-64-5
Kathon	0.05%	55965-84-9

4. FIRST AID MEASURES

Inhalation: Remove to fresh air. If breathing is difficult, get medical attention.

Ingestion: If person is conscious, wash out mouth with water. Get medical attention.

Skin Exposure: Wash skin with soap and water. **Eye Exposure:** Flush eyes water as a precaution.

5. FIRE FIGHTING MEASURES

Flammability: Not flammable.

Fire extinguishing media: water spray, dry chemical, foam, or carbon dioxide.

Firefighting: wear protective clothing and self-contained breathing apparatus to prevent contact with skin and eyes.

Specific Hazard: none known

6. ACCIDENTAL RELEASE MEASURES

Use appropriate personal protective equipment. Absorb liquid with an absorbent material. Wash spill site after material has been picked up for disposal.

7. HANDLING AND STORAGE

Ensure adequate ventilation. Handle in accordance with good industrial hygiene and safety practice. Keep container tightly closed. Recommended storage temperature 4'C.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines: This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Engineering Measures: showers, eyewash, ventilation systems. **Hygiene Measures:** wear suitable gloves and eye/face protection.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: red liquid

Odor: data not available data not available pH: Boiling Point: data not available Melting Point: data not available Freezing Point: data not available Volatile Organic Compounds (VOC): data not available Autoignition temp. data not available Solubility: water soluble

10. STABILITY AND REACTIVITY

Stability: no data available.
Conditions/materials to avoid: no data available
Hazardous Decomposition: no data available
Hazardous polymerization: no data available.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity no data available Chronic Toxicity no data available

Routes of Exposure:

Skin Exposure: May be harmful if absorbed through skin.

Eye Exposure: May cause eye irritation. Inhalation: May be harmful if inhaled. Ingestion: May be harmful if swallowed.

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

12. ECOLOGICAL INFORMATION

No data available

13. DISPOSAL CONSIDERATIONS

Dispose of in accordance with federal, state and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material.

14. TRANSPORT INFORMATION

D.O.T.

Proper Shipping Name: None

This substance is considered non-hazardous for transport.

IATA

Proper Shipping Name: None

This substance is considered non-hazardous for air transport.

15. REGULATORY INFORMATION

OSHA: Not classified as hazardous. EU: Not classified as dangerous. Canadian DSL: Not Listed SARA 302, 313 Not Listed. SARA 311/312: Not Listed.

Massachusetts Right To Know: Not Listed. Pennsylvania Right To Know: Not Listed. New Jersey Right To Know: Not Listed.

California Prop. 65: Not Listed

16. OTHER INFORMATION