

# Material Safety Data Sheet (MSDS) for PathScan® RTK Signaling Antibody Array Kit



## I. Identification:

**Product name:** PathScan® RTK Signaling Antibody Array Kit

**Product Catalog:** 7949, 7982 Kits

**Manufacturer Supplier:** Cell Signaling Technology

3 Trask Lane

Danvers, MA 01923 USA

978-867-2300 TEL

978-867-2400 FAX

978-578-6737 EMERGENCY TEL

## II. Composition/Information:

**Substance Name:** PathScan® RTK Signaling Antibody Array Kit

**CAS#:** None

**This product is For Research Use Only.** According to 29 CFR 1910.1200(d), mixtures with hazardous ingredients at less than <1% and carcinogens at less than <0.1% are considered non-hazardous. Please refer to the individual material safety data sheets for hazard information specific to kit components.

- Array Slides MSDS
- Cell Lysis Buffer (CST#9803) MSDS
- Array Blocking Buffer MSDS
- Array Diluent Buffer MSDS
- Array Wash Buffer MSDS
- Detection Antibody Cocktail MSDS
- HRP-linked Streptavidin MSDS (Kit 7982 only)
- DyLight 680®-linked Steptavidin MSDS (Kit 7949 only)
- 20X LumiGLO & 20X Peroxide (CST#7003) MSDS

## III. Hazard Identification:

### Emergency Overview:

Not considered hazardous.

Not expected to produce significant adverse health effects when the recommended instructions for use are followed. No known significant effects or critical hazards.

## IV. 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.

## V. Fire Fighting Measures:

**Flash Point:** Not applicable.

**Autoignition Temperature:** Not applicable.

**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.

**Specific Hazard:** None.

**VI. Accidental Release Measures:** Wear appropriate personal protective equipment as indicated in Section VIII. 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.

## VII. Handling And Storage:

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

**VIII - XIII.** 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.

## XIV. Transport Information:

**DOT: 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.

## XV. Regulatory Information:

**EU Regulations/Classifications:** Xi. Irritant.

**Risk Phrases:** Irritant. Irritating to eyes and skin. Harmful if swallowed.

**Safety Phrases:** In case of contact wash with water and seek medical attention.

**US Regulatory Information:** Irritant.

## XVI. Other Information:

This product is not intended for use in humans. 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. The above information is believed to be accurate but is not necessarily all-inclusive and shall be used only as a guide. Cell Signaling Technology, Inc., shall not be held liable for any damage resulting from the handling of or from contact with the above product.

# Material Safety Data Sheet (MSDS) for PathScan® Antibody Array Glass/Nitrocellulose Slides (with immobilized antibodies)



## I. Identification:

**Product name:** PathScan® Antibody Array Glass/Nitrocellulose Slides  
(with immobilized antibodies)

**Product Catalog:** 7949, 7982 Kit component

**Manufacturer Supplier:** Cell Signaling Technology  
3 Trask Lane  
Danvers, MA 01923 USA  
978-867-2300 TEL  
978-867-2400 FAX  
978-578-6737 EMERGENCY TEL

## II. Composition/Information:

**This product is For Research Use Only.** There are no ingredients present that, 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.

## III. Hazard Identification:

**OSHA:** Not considered hazardous.

**Potential Health Effects:** No known significant effects of critical hazards.

## IV. 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.

## V. 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.

**VI. Accidental Release Measures:** Wear appropriate personal protective equipment as indicated in Section VIII. 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.

## VII. Handling And Storage:

Store at 4°C in tightly closed container. Do not breathe vapor. Avoid contact with eyes, skin and clothing. Wash thoroughly after handling. Avoid prolonged or repeated exposure.

## VIII. Exposure Controls/Personal:

**Ventilation System:** A system of local (fume hood) and general exhaust is recommended.

**Skin Protection:** Wear compatible chemical resistant gloves and protective clothing.

**Eye protection:** Wear chemical safety goggles. Maintain emergency eyewash and shower in work area.

## IX. Physical And Chemical Properties

<b>Appearance:</b>	solid
<b>Odor:</b>	data not available
<b>pH:</b>	data not available
<b>Boiling Point:</b>	data not available
<b>Melting Point:</b>	data not available
<b>Freezing Point:</b>	data not available
<b>Volatile Organic Compounds (VOC):</b>	data not available
<b>Autoignition temp.:</b>	data not available
<b>Solubility in water:</b>	data not available

## X. Stability and Reactivity:

**Stability:** Stable.

**Conditions/materials to avoid:** Data not available.

**Hazardous Decomposition:** Data not available.

**Hazardous polymerization:** Should not occur under normal condition of storage and use.

## XI. Toxicological Information:

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

**Routes of Exposure:**

**Skin Exposure:** Data not available.

**Eye Exposure:** Data not available.

**Inhalation:** Data not available.

**Ingestion:** Data not available.

## XII. Ecological Information:

Data not available.

**XIII. Disposal Considerations:** Dispose of in accordance with federal, state and local environmental regulations. This product is not considered hazardous waste.

## XIV. Transport Information:

**DOT: 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.

## XV. 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.

## XVI. Other Information:

This product is not intended for use in humans. 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. The above information is believed to be accurate but is not necessarily all-inclusive and shall be used only as a guide. Cell Signaling Technology, Inc., shall not be held liable for any damage resulting from the handling of or from contact with the above product.

# Material Safety Data Sheet (MSDS) for Cell Lysis Buffer (10X)



## I. Identification:

**Product name:** Cell Lysis Buffer (10X)  
**Product Catalog:** 9803  
**CAS number:** Not applicable to mixtures  
**Manufacturer Supplier:** Cell Signaling Technology  
 3 Trask Lane  
 Danvers, MA 01923 USA  
 1-978-867-2300 TEL  
 1-978-867-2400 FAX  
 1-978-578-6737 Emergency Phone

## II. Composition/Information on Ingredients:

**This product is For Research Use Only.** According to 29 CFR 1910.1200(d), mixtures with hazardous ingredients at less than <1% and carcinogens at less than <0.1% are considered non-hazardous.

### Hazardous Reagent: 20X LumiGLO

Ingredient	Percent	CAS#
Triton X-100 (polyethylene glycol octylphenol ether)	1%	9002-93-1

## III. Hazard Identification:

!! CAUTION: This product is not for use in humans. It is intended for research purposes only. To the best of our knowledge, the chemical, physical, and toxicological properties of this material have not been established.

### Emergency Overview :

Harmful by Ingestion. Irritant.

### Potential Health Effects:

**Inhalation:** May be harmful if inhaled. Causes respiratory tract irritation.

**Eye Contact:** Causes eye irritation. Risk of damage to eyes.

**Skin Contact:** May be harmful if absorbed through skin. Causes skin irritation.

**Ingestion:** Harmful if swallowed.

## IV. First Aid Measures for hazardous ingredient:

### Triton X-100 (polyethylene glycol octylphenol ether):

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

**Ingestion: DO NOT INDUCE VOMITING.** If person is conscious, wash out mouth with water. Get medical attention.

**Skin contact:** Wash skin with soap or mild detergent and water for at least 15 minutes. If irritation develops or persists, get medical attention.

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

## V. Fire Fighting Measures:

**Flash Point:** data not available

**Autoignition Temperature:** data not available

**Explosion:** data not available

**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. May emit toxic fumes under fire conditions.

## VI. Accidental Release Measures:

Wear appropriate personal protective equipment as indicated in Section 8. 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.

## VII. Handling And Storage:

Store at 4°C in tightly closed container.

Avoid inhalation of vapor or mist. Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling. Avoid prolonged or repeated exposure.

## VIII. Exposure Controls/Personal

**Ventilation System:** a system of local (fume hood) and general exhaust is recommended.

**Skin Protection:** wear compatible chemical resistant gloves and protective clothing.

**Eye protection:** wear chemical safety goggles. Maintain emergency eyewash and shower in work area.

## IX. Physical and Chemical Properties

**Appearance:** colorless liquid

**Odor:** data not available

**pH:** data not available

**Boiling Point:** data not available

**Melting or Freezing Point:** data not available

**Flash Point:** data not available

**Volatile Organic Compounds (VOC):** data not available

**Autoignition temp.** data not available

**Solubility (water):** Soluble in water

## X. Stability and Reactivity:

**Stability:** Stable under ordinary conditions.

**Conditions/materials to avoid:** strong oxidizing agents, strong acids, strong bases

**Hazardous Decomposition:** carbon monoxide, carbon dioxide.

**Hazardous polymerization:** will not occur

## XI. Toxicological Information:

**Acute toxicity:** data not available

**Chronic exposure:** data not available

### Potential Health Effects:

**Inhalation:** May be harmful if inhaled. Causes respiratory tract irritation.

**Skin:** May be harmful if absorbed through skin. Causes skin irritation.

**Eyes:** Causes eye irritation.

**Ingestion:** Harmful if swallowed.

## XII. Ecological Information:

Data not available

## XIII. 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.

## XIV. 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.

## XV. Regulatory Information:

EU: Not classified

OSHA: Ingredient Triton X100, CAS#9002-93-1: Harmful by ingestion, Irritant

Canadian DSL: Listed: Ingredient Triton X100, CAS#9002-93-1

SARA 302, 313 Ingredients Not Listed.

SARA 311/312: Ingredient Triton X100, CAS#9002-93-1: Acute Health Hazard

Massachusetts Right To Know: Ingredients Not Listed.

Pennsylvania Right To Know: Ingredient Triton X100, CAS#9002-93-1

New Jersey Right To Know: Ingredient Triton X100, CAS#9002-93-1

California Prop. 65: Ingredients Not Listed.

## XVI. Other Information:

This product is for research use only and is not intended for use in humans. 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. The above information is believed to be accurate but is not necessarily all-inclusive and shall be used only as a guide. Cell Signaling Technology, Inc., shall not be held liable for any damage resulting from the handling of or from contact with the above product.

# Material Safety Data Sheet (MSDS) for PathScan® Antibody Array Blocking Buffer



## I. Identification:

**Product name:** PathScan® Antibody Array Blocking Buffer  
**Product Catalog:** 7949, 7982 Kit Component  
**CAS#:** None  
**Manufacturer Supplier:** Cell Signaling Technology  
 3 Trask Lane  
 Danvers, MA 01923 USA  
 978-867-2300 TEL  
 978-867-2400 FAX  
 978-578-6737 EMERGENCY TEL

## II. Composition/Information:

**This product is For Research Use Only.** There are no ingredients present that, 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.

## III. Hazard Identification:

**OSHA:** Not considered hazardous.  
**Potential Health Effects:** No known significant effects of critical hazards.  
**Routes of Exposure:**  
**Skin Exposure:** No known significant effects of critical hazards.  
**Eye Exposure:** No known significant effects of critical hazards.  
**Inhalation:** No known significant effects of critical hazards.  
**Ingestion:** No known significant effects of critical hazards.

## IV. 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.

## V. 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.

**VI. Accidental Release Measures:** Wear appropriate personal protective equipment as indicated in Section VIII. 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.

## VII. Handling And Storage:

Store at 4°C in tightly closed container. Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling. Avoid prolonged or repeated exposure.

## VIII. Exposure Controls/Personal:

**Ventilation System:** A system of local (fume hood) and general exhaust is recommended.  
**Skin Protection:** Wear compatible chemical resistant gloves and protective clothing.  
**Eye protection:** Wear chemical safety goggles. Maintain emergency eyewash and shower in work area.

## IX. Physical And Chemical Properties

**Appearance:** colorless liquid  
**Odor:** odor  
**pH:** data not available  
**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 in water:** soluble in water

## X. Stability and Reactivity:

**Stability:** Stable.  
**Conditions/materials to avoid:** Data not available.  
**Hazardous Decomposition:** Data not available.  
**Hazardous polymerization:** should not occur under normal condition of storage and use.

## XI. Toxicological Information:

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.  
**Potential Health Effects:** No known significant effects of critical hazards.  
**Routes of Exposure:**  
**Skin Exposure:** No known significant effects of critical hazards.  
**Eye Exposure:** No known significant effects of critical hazards.  
**Inhalation:** No known significant effects of critical hazards.  
**Ingestion:** No known significant effects of critical hazards.

**XII. Ecological Information:** No data available.

**XIII. Disposal Considerations:** Dispose of in accordance with federal, state and local environmental regulations. This product is not considered hazardous waste.

## XIV. Transport Information:

**DOT: 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.

## XV. 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.

## XVI. Other Information:

This product is not intended for use in humans. 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. The above information is believed to be accurate but is not necessarily all-inclusive and shall be used only as a guide. Cell Signaling Technology, Inc., shall not be held liable for any damage resulting from the handling of or from contact with the above product.

# Material Safety Data Sheet (MSDS) for PathScan® Antibody Array Diluent Buffer



## I. Identification:

**Product name:** PathScan® Antibody Array Diluent Buffer  
**Product Catalog:** 7949, 7982 Kit Component  
**Manufacturer Supplier:** Cell Signaling Technology  
 3 Trask Lane  
 Danvers, MA 01923 USA  
 978-867-2300 TEL  
 978-867-2400 FAX  
 978-578-6737 EMERGENCY TEL

## II. Composition/Information:

**This product is For Research Use Only.** According to 29 CFR 1910.1200(d), mixtures with hazardous ingredients at less than <1% and carcinogens at less than <0.1% are considered non-hazardous.

Ingredients:	Percent	CAS#
Bovine serum albumin	5%	9048-46-8
Tween20	<1%	9005-64-5
Kathon	<0.5%	55965-84-9
Non-hazardous phosphate buffered saline	>95%	none

## III. Hazard Identification:

**This product is not for use in humans. It is intended for research purposes only.** To the best of our knowledge, the chemical, physical, and toxicological properties of this material have not been established.

**OSHA:** No known hazards.

**EU:** Ingredient Kathon (0.5%): Xi: Irritant. R36/38-43-52/53

### Routes of Exposure:

**Skin Exposure:** May cause skin irritation. May be harmful if absorbed through skin.

**Eye Exposure:** May cause eye irritation.

**Inhalation:** May be harmful if inhaled. Material may be irritating to mucous membrane and upper respiratory tract.

**Ingestion:** May be harmful if swallowed.

## IV. 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.

## V. Fire Fighting Measures:

**Flash Point:** Not applicable.

**Autoignition Temperature:** Not applicable.

**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.

**Specific Hazard:** None.

**VI. Accidental Release Measures:** Wear appropriate personal protective equipment as indicated in Section VIII. 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.

## VII. Handling And Storage:

Store at 4°C in tightly closed container. Do not breathe vapor. Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling. Avoid prolonged or repeated exposure.

## VIII. Exposure Controls/Personal:

**Ventilation System:** A system of local (fume hood) and general exhaust is recommended.

**Skin Protection:** Wear compatible chemical resistant gloves and protective clothing.

**Eye protection:** Wear chemical safety goggles. Maintain emergency eyewash and shower in work area.

## IX. Physical And Chemical Properties

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

## X. Stability and Reactivity:

**Stability:** Stable under normal conditions.

**Conditions/materials to avoid:** Data not available.

**Hazardous Decomposition:** Data not available.

**Hazardous polymerization:** Will not occur.

## XI. Toxicological Information:

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

### Routes of Exposure:

**Skin Exposure:** May cause skin irritation. May be harmful if absorbed through skin.

**Eye Exposure:** May cause eye irritation.

**Inhalation:** May be harmful if inhaled. Material may be irritating to mucous membrane and upper respiratory tract.

**Ingestion:** May be harmful if swallowed.

Toxicity information on hazardous Ingredient **Kathon (0.5%), CAS#55965-84-9**

LD50 Mouse Oral: 60 mg/kg LD50 Rat Oral: 53 mg/kg

## XII. Ecological Information:

No data available.

**XIII. 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.

## XIV. Transport Information:

**DOT: 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.

## XV. Regulatory Information:

**EU:** Ingredient Kathon CAS# 55965-84-9 Annex I Listed: Index #: 613-167-00-5

**0.5% Kathon concentration classification:** Xi: Irritant. R36/38-43-52/53

**R36/38:** Wear suitable protective clothing, gloves and eye/face protection

**R43:** May cause sensitization by skin contact.

**R53:** May cause long-term adverse effects in the aquatic environment.

**OSHA:** No known hazards.

**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.

## XVI. Other Information:

This product is not intended for use in humans. 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. The above information is believed to be accurate but is not necessarily all-inclusive and shall be used only as a guide. Cell Signaling Technology, Inc., shall not be held liable for any damage resulting from the handling of or from contact with the above product.



# Material Safety Data Sheet (MSDS) for PathScan® Antibody Array Wash Buffer



## I. Identification:

**Product name:** PathScan® Antibody Array Wash Buffer  
**Product Catalog:** 7949, 7982 Kit Component  
**Manufacturer Supplier:** Cell Signaling Technology  
 3 Trask Lane  
 Danvers, MA 01923 USA  
 978-867-2300 TEL  
 978-867-2400 FAX  
 978-578-6737 EMERGENCY TEL

## II. Composition/Information:

**This product is For Research Use Only.** According to 29 CFR 1910.1200(d), mixtures with hazardous ingredients at less than <1% and carcinogens at less than <0.1% are considered non-hazardous.

Ingredients:	Percent	CAS#
Tween20	2%	9005-64-5
Non-hazardous 20X phosphate buffered saline	98%	none

## III. Hazard Identification:

No known hazards.

**This product is not for use in humans. It is intended for research purposes only.** To the best of our knowledge, the chemical, physical, and toxicological properties of this material have not been established.

## IV. 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.

## V. Fire Fighting Measures:

**Flash Point:** Not applicable.  
**Autoignition Temperature:** Not applicable.  
**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.  
**Specific Hazard:** None.

**VI. Accidental Release Measures:** Wear appropriate personal protective equipment as indicated in Section VIII. 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.

## VII. Handling And Storage:

Store at 4°C in tightly closed container. Do not breathe vapor. Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling. Avoid prolonged or repeated exposure.

## VIII. Exposure Controls/Personal:

**Ventilation System:** A system of local (fume hood) and general exhaust is recommended.  
**Skin Protection:** Wear compatible chemical resistant gloves and protective clothing.  
**Eye protection:** Wear chemical safety goggles. Maintain emergency eyewash and shower in work area.

## IX. Physical And Chemical Properties

**Appearance:** colorless liquid  
**Odor:** data not available  
**pH:** data not available  
**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 in water:** data not available

## X. Stability and Reactivity:

**Stability:** Stable.  
**Conditions/materials to avoid:** Data not available.  
**Hazardous Decomposition:** Data not available.  
**Hazardous polymerization:** Will not occur.

## XI. Toxicological Information:

No known hazards.

**Routes of Exposure:**  
**Skin Exposure:** May cause skin irritation. May be harmful if absorbed through skin.  
**Eye Exposure:** May cause eye irritation.  
**Inhalation:** May be harmful if inhaled. Material may be irritating to mucous membrane and upper respiratory tract.  
**Ingestion:** May be harmful if swallowed.

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

## XII. Ecological Information:

No data available.

**XIII. 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.

## XIV. Transport Information:

**DOT: 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.

## XV. Regulatory Information:

**EU:** Not classified.  
**OSHA:** No known hazards.  
**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.

## XVI. Other Information:

This product is not intended for use in humans. 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. The above information is believed to be accurate but is not necessarily all-inclusive and shall be used only as a guide. Cell Signaling Technology, Inc., shall not be held liable for any damage resulting from the handling of or from contact with the above product.

# Material Safety Data Sheet (MSDS) for PathScan® Antibody Array Detection Antibody Cocktail



## I. Identification:

**Product name:** PathScan® Antibody Array Detection Antibody Cocktail

**Product Catalog:** 7949, 7982 Kit Component

**Manufacturer Supplier:** Cell Signaling Technology

3 Trask Lane

Danvers, MA 01923 USA

978-867-2300 TEL

978-867-2400 FAX

978-578-6737 EMERGENCY TEL

## II. Composition/Information:

**This product is For Research Use Only.** According to 29 CFR 1910.1200(d), mixtures with hazardous ingredients at less than <1% and carcinogens at less than <0.1% are considered non-hazardous.

Ingredients:	Percent	CAS#
Bovine Saline Albumin	5%	9048-46-8
Tween20	<1%	9005-64-5
Kathon	<0.5%	55965-84-9
Immunoglobulin	<0.1%	none
Non-hazardous phosphate buffered saline	>95%	none

## III. Hazard Identification:

**This product is not for use in humans. It is intended for research purposes only.**

To the best of our knowledge, the chemical, physical, and toxicological properties of this material have not been established.

**OSHA:** Not considered hazardous.

**EU:** Ingredient Kathon (0.5%): Xi: Irritant. R36/38-43-52/53

**Routes of Exposure:**

**Skin Exposure:** May cause skin irritation. May be harmful if absorbed through skin.

**Eye Exposure:** May Cause eye irritation.

**Inhalation:** May be harmful if inhaled. Material may be irritating to mucous membrane and upper respiratory tract.

**Ingestion:** May be harmful if swallowed.

## IV. 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.

## V. 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.

**VI. Accidental Release Measures:** Wear appropriate personal protective equipment as indicated in Section VIII. 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.

## VII. Handling And Storage:

Store at 4°C in tightly closed container. Do not breathe vapor. Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling. Avoid prolonged or repeated exposure.

## VIII. Exposure Controls/Personal:

**Ventilation System:** A system of local (fume hood) and general exhaust is recommended.

**Skin Protection:** Wear compatible chemical resistant gloves and protective clothing.

**Eye protection:** Wear chemical safety goggles. Maintain emergency eyewash and shower in work area.

## IX. Physical And Chemical Properties

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

## X. Stability and Reactivity:

**Stability:** Stable.

**Conditions/materials to avoid:** Bases, oxidizing agents.

**Hazardous Decomposition:** Data not available.

**Hazardous polymerization:** Will not occur.

## XI. Toxicological Information:

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

**Routes of Exposure:**

**Skin Exposure:** May cause skin irritation. May be harmful if absorbed through skin.

**Eye Exposure:** May cause eye irritation.

**Inhalation:** May be harmful if inhaled. Material may be irritating to mucous membrane and upper respiratory tract.

**Ingestion:** May be harmful if swallowed.

Toxicity information on hazardous Ingredient **Kathon (0.5%), CAS#55965-84-9**

LD50 Mouse Oral: 60 mg/kg LD50 Rat Oral: 53 mg/kg

## XII. Ecological Information:

No data available.

**XIII. 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.

## XIV. Transport Information:

**DOT: 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.

## XV. Regulatory Information:

**EU:** Ingredient Kathon CAS# 55965-84-9 Annex I Listed: Index #: 613-167-00-5

**0.5% Kathon concentration classification:** Xi: Irritant. R36/38-43-52/53

**R36/38:** Wear suitable protective clothing, gloves and eye/face protection

**R43:** May cause sensitization by skin contact.

**R53:** May cause long-term adverse effects in the aquatic environment.

**OSHA:** No known hazards.

**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.

## XVI. Other Information:

This product is not intended for use in humans. 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. The above information is believed to be accurate but is not necessarily all-inclusive and shall be used only as a guide. Cell Signaling Technology, Inc., shall not be held liable for any damage resulting from the handling of or from contact with the above product.

# Material Safety Data Sheet (MSDS) for PathScan® Antibody Array DyLight 680®-linked Streptavidin



## I. Identification:

**Product name:** PathScan® Antibody Array DyLight 680®-linked Streptavidin  
**Product Catalog:** 7949 Kit Component  
**Manufacturer Supplier:** Cell Signaling Technology  
 3 Trask Lane  
 Danvers, MA 01923 USA  
 978-867-2300 TEL  
 978-867-2400 FAX  
 978-578-6737 EMERGENCY TEL

## II. Composition/Information:

**This product is For Research Use Only.** According to 29 CFR 1910.1200(d), mixtures with hazardous ingredients at less than <1% and carcinogens at less than <0.1% are considered non-hazardous.

Ingredients:	Percent	CAS#
Bovine serum albumin	5%	9048-46-8
Tween20	<1%	9005-64-5
Kathon	<0.5%	55965-84-9
Non-hazardous phosphate buffered saline	>95%	none

## III. Hazard Identification:

**This product is not for use in humans. It is intended for research purposes only.** To the best of our knowledge, the chemical, physical, and toxicological properties of this material have not been established.

**OSHA:** No known hazards.

**EU:** Ingredient Kathon (0.5%): Xi: Irritant. R36/38-43-52/53

### Routes of Exposure:

**Skin Exposure:** May cause skin irritation. May be harmful if absorbed through skin.

**Eye Exposure:** May cause eye irritation.

**Inhalation:** May be harmful if inhaled. Material may be irritating to mucous membrane and upper respiratory tract.

**Ingestion:** May be harmful if swallowed.

## IV. 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 with water for at least 15 minutes. Get medical attention.

## V. Fire Fighting Measures:

**Flash Point:** Not applicable.

**Autoignition Temperature:** Not applicable.

**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.

**Specific Hazard:** None.

**VI. Accidental Release Measures:** Wear appropriate personal protective equipment as indicated in Section VIII. 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.

## VII. Handling And Storage:

Store at 4°C in tightly closed container. Do not breathe vapor. Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling. Avoid prolonged or repeated exposure.

## VIII. Exposure Controls/Personal:

**Ventilation System:** A system of local (fume hood) and general exhaust is recommended.

**Skin Protection:** Wear compatible chemical resistant gloves and protective clothing.

**Eye protection:** Wear chemical safety goggles. Maintain emergency eyewash and shower in work area.

## IX. Physical And Chemical Properties

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

## X. Stability and Reactivity:

**Stability:** Stable under normal conditions.

**Conditions/materials to avoid:** Data not available.

**Hazardous Decomposition:** Data not available.

**Hazardous polymerization:** Will not occur.

## XI. Toxicological Information:

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

### Routes of Exposure:

**Skin Exposure:** May cause skin irritation. May be harmful if absorbed through skin.

**Eye Exposure:** May cause eye irritation.

**Inhalation:** May be harmful if inhaled. Material may be irritating to mucous membrane and upper respiratory tract.

**Ingestion:** May be harmful if swallowed.

Toxicity information on hazardous ingredient **Kathon (0.5%), CAS#55965-84-9**

LD50 Mouse Oral: 60 mg/kg LD50 Rat Oral: 53 mg/kg

## XII. Ecological Information:

No data available.

**XIII. 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.

## XIV. Transport Information:

**DOT: 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.

## XV. Regulatory Information:

**EU:** Ingredient Kathon CAS# 55965-84-9 Annex I Listed: Index #: 613-167-00-5

**0.5% Kathon concentration classification:** Xi: Irritant. R36/38-43-52/53

**R36/38:** Wear suitable protective clothing, gloves and eye/face protection

**R43:** May cause sensitization by skin contact.

**R53:** May cause long-term adverse effects in the aquatic environment.

**OSHA:** No known hazards.

**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.

## XVI. Other Information:

This product is not intended for use in humans. 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. The above information is believed to be accurate but is not necessarily all-inclusive and shall be used only as a guide. Cell Signaling Technology, Inc., shall not be held liable for any damage resulting from the handling of or from contact with the above product.



# Material Safety Data Sheet (MSDS) for 20X LumiGLO<sup>®</sup> and 20X Peroxide

## I. Identification:

**Product name:** 20X LumiGLO<sup>®</sup> and 20X Peroxide  
**Product Catalog:** 7003  
**CAS number:** None  
**Manufacturer Supplier:** Cell Signaling Technology  
 3 Trask Lane  
 Danvers, MA 01923 USA  
 1-978-867-2300 TEL  
 1-978-867-2400 FAX  
 1-978-578-6737 Emergency TEL

## II. Composition/Information on Ingredients:

Hazardous Reagent:	Percent	CAS#
Dimethyl sulfoxide	≤20%	67-68-5

**This product is For Research Use Only.** According to 29 CFR 1910.1200(d), mixtures with hazardous ingredients at less than <1% and carcinogens at less than <0.1% are considered non-hazardous.

## III. Hazard Identification:

**CAUTION:** This product is not for use in humans. It is intended for research purposes only. To the best of our knowledge, the chemical, physical, and toxicological properties of this material have not been established.

**Emergency Overview:** Irritant. Irritating to eyes, respiratory system, skin.

### Potential Health Effects:

**Inhalation:** May be harmful if inhaled. May cause respiratory tract irritation.

**Eye Contact:** May cause eye irritation.

**Skin Contact:** May be harmful if absorbed through skin. Prolonged or repeated contact may cause skin irritation.

**Ingestion:** May be harmful if swallowed.

## IV. 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.

## V. Fire Fighting Measures:

**Flash Point:** N/A

**Autoignition Temperature:** N/A

**Explosion:** N/A

**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. May emit toxic fumes under fire conditions.

## VI. Accidental Release Measures:

Wear appropriate personal protective equipment as indicated in Section VIII. 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.

## VII. Handling And Storage:

Store at 4°C in tightly closed container.

Avoid inhalation of vapor or mist. Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling. Avoid prolonged or repeated exposure.

## VIII. Exposure Controls/Personal:

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

**Skin Protection:** wear compatible chemical resistant gloves and protective clothing.

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

## IX. Physical And Chemical Properties:

<b>Appearance:</b>	clear faint yellow colored liquid
<b>Odor:</b>	data not available
<b>pH:</b>	data not available
<b>Boiling Point:</b>	>100°C/212°F (water)
<b>Melting or Freezing Point:</b>	<0°C/32°F (water)
<b>Flash Point:</b>	data not available
<b>Volatile Organic Compounds (VOC):</b>	data not available
<b>Autoignition temp.</b>	data not available
<b>Solubility (water)</b>	miscible in water

## X. Stability and Reactivity:

**Stability:** Stable under normal conditions.

**Conditions to avoid:** strong oxidizing agents, strong acids, strong bases.

**Hazardous Decomposition:** carbon monoxide, carbon dioxide.

**Hazardous polymerization:** will not occur.

## XI. Toxicological Information:

Acute toxicity: data not available. Chronic exposure: data not available

### Potential Health Effects:

**Inhalation:** May be harmful if inhaled. Causes respiratory tract irritation.

**Skin:** May be harmful if absorbed through skin. Causes skin irritation.

**Eyes:** Causes eye irritation.

**Ingestion:** Harmful if swallowed.

Toxicity Data on Hazardous ingredient Dimethyl Sulfoxide, CAS#67-68-5

RTECS: PV6210000

LD50 Oral rat 14,500 mg/kg

LC50 Inhalation rat 4 h 40250 ppm

LD50 Dermal rabbit > 5,000 mg/kg

## XII. Ecological Information:

No data available.

**XIII. 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.

## XIV. 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.

## XV. Regulatory Information:

EU: Not classified

OSHA: Ingredient Dimethyl Sulfoxide, CAS#67-68-5: Combustible Liquid, Target Organ Effect

Canadian DSL: Listed: Ingredient Dimethyl Sulfoxide, CAS#67-68-5

SARA 302, 313 Ingredients Not Listed.

SARA 311/312: Ingredient Dimethyl Sulfoxide, CAS#67-68-5: Fire Hazard, Chronic Health Hazard.

Massachusetts Right To Know: Ingredients Not Listed.

Pennsylvania Right To Know: Ingredient Dimethyl Sulfoxide, CAS#67-68-5

New Jersey Right To Know: Ingredient Dimethyl Sulfoxide, CAS#67-68-5

California Prop. 65: Ingredients Not Listed.

## XVI. Other Information:

This product is for research use only and is not intended for use in humans. 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. The above information is believed to be accurate but is not necessarily all-inclusive and shall be used only as a guide. Cell Signaling Technology, Inc., shall not be held liable for any damage resulting from the handling of or from contact with the above product.