

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



I. Identification:

Product name: PathScan® Intracellular Signaling Antibody Array Kit

Product Catalog: 7744, 7323 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® Intracellular 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
- PathScan® Sandwich ELISA Lysis Buffer (1X) (CST#7018) MSDS
- Array Blocking Buffer MSDS
- Array Diluent Buffer MSDS
- Array Wash Buffer MSDS
- Detection Antibody Cocktail MSDS
- HRP-linked Streptavidin MSDS (Kit 7323 only)
- DyLight 680®-linked Steptavidin MSDS (Kit 7744 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: 7744, 7323 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

Appearance:	solid
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: 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 PathScan® Sandwich ELISA Lysis buffer (1X)



Cell Signaling
TECHNOLOGY®

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I. Identification:

Product name: PathScan® Sandwich ELISA Lysis buffer (1X)

Product Catalog: 7018

CAS#: n/a (not applicable to mixtures)

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:

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.

Ingredient	Percent (%w/v)	CAS#	Hazardous
Triton X100 (polyethylene glycol octylphenyl ether)	1%	9002-93-1	Yes
Sodium pyrophosphate	0.89%	13472-36-1	No
Sodium chloride	0.88%	7647-14-5	No
Tris-HCl	0.32%	1185-53-1	No
Sodium fluoride	<0.11%	7681-49-4	No
EGTA	<0.04%	64-42-5	No
EDTA, disodium salt	<0.04%	6381-92-6	No
Beta-glycerophosphate	0.03%	819-83-0	No
Sodium orthovanadate	<0.02%	13721-39-6	No
Leupeptin	<0.01%	103476-89-7	No
Water	>96%	7732-18-5	No

III. Hazard Identification: This product is not for use in humans. It is intended for research purposes only. EMERGENCY OVERVIEW:

Triton X100 (CAS# 9002-93-1) OSHA hazards: Harmful by ingestion. Irritant.

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: May cause eye irritation.

Ingestion: Harmful if swallowed.

IV. First Aid Measures:

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

Ingestion: If person is conscious, wash out mouth with water. Do not induce vomiting. Get medical attention.

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

V. Fire Fighting Measures:

Flash Point: No data available.

Autoignition Temperature: No data available.

Explosion: No data 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.

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

Appearance:	clear liquid
Odor	data not available
pH:	7.5
Melting Point:	data not available
Boiling Point:	data not available
Flash Point	data not available
Freezing Point:	data not available
Volatile Organic Compounds:	data not available
Autoignition temp.	data not available
Solubility in water:	soluble in phosphate buffered saline

X. Stability and Reactivity:

Stability: Stable under normal conditions.

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

Hazardous Decomposition: carbon monoxide, carbon dioxide.

Hazardous polymerization: data not available.

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.

Exposure Remarks on Hazardous Ingredient Triton X100 (CAS# 99036-19-5)

LD50 mouse intravenous: 1200 mg/kg

LD50 rat oral 1800 - 3800 mg/kg

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:

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:

Hazardous Ingredient Triton X100 (CAS# 9002-93-1)

OSHA: Harmful by ingestion, Irritant.

DSL: Listed

SARA 302, 313 Not Listed.

SARA 311/312: Acute Health Hazard

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

Right To Know: 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 Blocking Buffer



I. Identification:

Product name: PathScan® Antibody Array Blocking Buffer
Product Catalog: 7744, 7323 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: 7744, 7323 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

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 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: 7744, 7323 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: 7744, 7323 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

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: 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 HRP-linked Streptavidin



I. Identification:

Product name: PathScan® Antibody Array HRP-linked Streptavidin
Product Catalog: 7323 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: odorless
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: 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: I 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 DyLight 680®-linked Streptavidin



I. Identification:

Product name: PathScan® Antibody Array DyLight 680®-linked Streptavidin
Product Catalog: 7744 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

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 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® and 20X Peroxide

I. Identification:

Product name: 20X LumiGLO® 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:

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