

Safety Data Sheet (SDS) According to the OSHA Hazard Communication Standard 29 CFR 1910.1200

Issuing Date: 2018-01-19 **Revision Date:** 2025-02-19 **Version:** 2

SECTION 1. Identification

Product identifier

Product No 7149

Product name PathScan® Phospho-Stat3 (Tyr705) Chemiluminescent

Sandwich ELISA Kit

Kit Component 52093: Stat3 Rabbit mAb Coated Microwells

13149: Phospho-Stat3 (Tyr705) Mouse Detection mAb

13304: Anti-mouse IgG, HRP-linked Antibody (ELISA Formulated)

84850: Luminol/Enhancer Solution 42552: Stable Peroxide Buffer 11083: ELISA Sample Diluent 13339: Detection Antibody Diluent

13515: HRP Diluent

9801: ELISA Wash Buffer (20X) 9803: Cell Lysis Buffer (10X)

Hazardous Components

9801: ELISA Wash Buffer (20X) 9803: Cell Lysis Buffer (10X)

13515: HRP Diluent

Recommended use of the chemical and restrictions on use

Identified uses This product is intended for research purposes only.

Manufacturer, importer, supplier

Manufacturer address Cell Signaling Technology, Inc.

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TEL: +1 978 867 2300 FAX: +1 978 867 2400 www.cellsignal.com

Website www.cellsignal.com Email address support@cellsignal.com

Emergency telephone number In case of emergency call CHEMTREC 1-800-424-9300

SECTION 2. Hazard(s) identification

Classification

This substance/mixture is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 1

Skin sensitization	Category 1
Chronic aquatic toxicity	Category 3

GHS Label elements, including precautionary statements



Signal Word Danger

Hazard statement(s)

Causes skin irritation
Causes serious eye damage
May cause an allergic skin reaction
Harmful to aquatic life with long lasting effects

Precautionary Statement(s)

Avoid breathing dust/fume/gas/mist/vapors/spray.

Wash face, hands and any exposed skin thoroughly after handling.

Wear protective gloves/protective clothing/eye protection/face protection.

Contaminated work clothing should not be allowed out of the workplace.

IF ON SKIN: Wash with plenty of soap and water

If skin irritation occurs: Get medical advice/attention

Take off contaminated clothing and wash before reuse

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Immediately call a POISON CENTER or doctor/physician.

Avoid release to the environment.

Dispose of contents/container to an approved waste disposal plant.

Supplementary Hazard Information

Hazards not otherwise classified (HNOC)

Not applicable.

SECTION 3. Composition/information on ingredients

Kit Component 84850: Luminol/Enhancer Solution

Chemical name	CAS No	Weight-%
Ethylene glycol	107-21-1	1-3

Kit Component 9801: ELISA Wash Buffer (20X)

WARNING: May cause an allergic skin reaction.

Chemical name	CAS No	Weight-%
reaction mass of 5-chloro-2-methyl-4-isothiazolin-3-one and	55965-84-9	0.005-0.025
2-methyl-2H -isothiazol-3-one		

Kit Component

11083: ELISA Sample Diluent

Chemical name	CAS No	Weight-%
sodium azide	26628-22-8	<0.1

Kit Component

9803: Cell Lysis Buffer (10X)

DANGER: Causes severe skin burns and eye damage. May cause an allergic skin reaction.

Chemical name	CAS No	Weight-%
polyethylene glycol	9002-93-1	10
p-(1,1,3,3-tetramethylbutyl)phenylether		
tetrasodium pyrophosphate, decahydrate	13472-36-1	0.1-1

Kit Component

13339: Detection Antibody Diluent

Chemical name	CAS No	Weight-%
sodium azide	26628-22-8	<0.1

Kit Component

13515: HRP Diluent

WARNING: May cause an allergic skin reaction.

Chemical name	CAS No	Weight-%
reaction mass of	55965-84-9	0.005-0.025
5-chloro-2-methyl-4-isothiazolin-3-one and		
2-methyl-2H -isothiazol-3-one		

Kit Component 52093: Stat3 Rabbit mAb Coated Microwells

13149: Phospho-Stat3 (Tyr705) Mouse Detection mAb

13304: Anti-mouse IgG, HRP-linked Antibody (ELISA Formulated)

42552: Stable Peroxide Buffer

These products do not contain substances at concentrations requiring disclosure under 29 CFR 1910.1200 (OSHA Hazard Communication Standard).

SECTION 4. First-aid measures

Eye contact In the case of contact with eyes, rinse immediately with plenty of water and seek medical

advice.

Skin contactWash off immediately with soap and plenty of water removing all contaminated clothes and

shoes. If skin irritation or rash occurs: Get medical advice/attention.

Inhalation IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.

Get medical attention immediately if symptoms occur. If breathing is difficult, give oxygen. If

not breathing, give artificial respiration.

Ingestion Clean mouth with water and afterwards drink plenty of water. Do NOT induce vomiting.

Never give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed

Contains kit components which may cause the following effects, refer to individual component SDSs for full information on symptoms. Liquid, aerosols and vapors of this product are irritating and can cause pain, tearing, reddening and swelling accompanied by a stinging sensation and/or a feeling like that of fine dust in the eyes. Contains an animal derived biological. May produce an allergic reaction in susceptible individuals. Symptoms of allergic reaction may include rash, itching, swelling, trouble

breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain, or flushing.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

Advice for emergency responders

General advice For further assistance, contact your local Poison Control Center.

Protection of first-aiders Ensure that medical personnel are aware of the material(s) involved, and take precautions

to protect themselves

SECTION 5. Fire-fighting measures

Extinguishing media

Suitable Extinguishing Media Use extinguishing measures that are appropriate to local circumstances and the

surrounding environment.

Specific hazards arising from the chemical

No information available.

Explosion Data

Sensitivity to Mechanical Impact None Sensitivity to Static Discharge None

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

SECTION 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Avoid

contact with skin, eyes and clothing. Use personal protective equipment. Ensure adequate

ventilation.

Other information Refer to protective measures listed in Sections 7 and 8.

Environmental precautions

Do not allow material to contaminate ground water system. Should not be released into the environment. Do not flush into surface water or sanitary sewer system. Prevent further leakage or spillage if safe to do so.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning upDike far ahead of liquid spill for later disposal. Soak up with inert absorbent material.

Prevent product from entering drains. Clean contaminated surface thoroughly.

SECTION 7. Handling and storage

Precautions for safe handling

Avoid contact with skin, eyes and clothing. Wear personal protective equipment. Ensure adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Handle product only in closed system or provide appropriate exhaust ventilation at machinery.

Conditions for safe storage, including any incompatibilities

Technical measures/Storage

Keep away from direct sunlight. Keep containers tightly closed in a dry, cool and

conditions

well-ventilated place. No information available

Packaging material Incompatible products

Metals, Strong oxidizing agents, strong acids, and strong bases

SECTION 8. Exposure controls/personal protection

Control parameters

Occupational exposure limit values				
Chemical name	ACGIH TLV	OSHA PEL	NIOSH REL	
Ethylene glycol	STEL: 50 ppm vapor fraction STEL: 10 mg/m³ inhalable particulate matter, aerosol only TWA: 25 ppm vapor fraction		-	
tetrasodium pyrophosphate, decahydrate	-	-	TWA: 5 mg/m ³	
sodium azide	Ceiling: 0.29 mg/m ³ Ceiling: 0.11 ppm	-	Ceiling: 0.1 ppm Ceiling: 0.3 mg/m ³	

Appropriate engineering controls

Showers, eyewash stations, and ventilation systems.

Individual protection measures, such as personal protective equipment

Personal protective equipment (PPE) needs to be selected depending on the implemented engineering controls, frequency/duration of work activities and the concentrations of the hazardous substance.

Eve/face protection Skin and body protection

Hygiene measures

Tightly fitting safety goggles.

Lightweight protective clothing. Impervious gloves.

When workers are facing concentrations above the exposure limit they must use appropriate Respiratory protection

certified respirators. No special protective equipment required.

Remove and wash contaminated clothing and gloves, including the inside, before re-use. Contaminated work clothing should not be allowed out of the workplace. Provide regular cleaning of equipment, work area and clothing. Keep away from food, drink and animal

feeding stuffs. Wear suitable gloves and eye/face protection.

SECTION 9. Physical and chemical properties

Information on the known physical chemical properties of each component within Kit are given below. If not included, information is either not available or not applicable. Refer to individual kit component SDS for further information.

Information on basic physical and chemical properties

Kit Component 84850: Luminol/Enhancer Solution

Physical state Liquid Appearance Clear

Color Colorless or Light pink

pH 9.5 (20 °C) Solubility Soluble in water

Kit Component 42552: Stable Peroxide Buffer

Physical state Liquid
Appearance Clear
Color Colorless
pH 4.9 - 5.1 (20 °C)

Kit Component 9801: ELISA Wash Buffer (20X)

Physical state Liquid
Appearance Clear
Color Colorless
pH 6.4 (20 °C)

Kit Component 11083: ELISA Sample Diluent

Physical state Liquid
Appearance Clear
Color Blue
pH 7.1 (20 °C)

Kit Component 9803: Cell Lysis Buffer (10X)

Physical state Liquid
Color Colorless
pH 7.5 (20 °C)

Kit Component 13149: Phospho-Stat3 (Tyr705) Mouse Detection mAb

Physical state Solid

Appearance Lyophilized, Powder

Color Green

Kit Component 13339: Detection Antibody Diluent

Physical state Liquid
Appearance Clear
Color Green
pH 7.4 (20 °C)

Kit Component 13304: Anti-mouse IgG, HRP-linked Antibody (ELISA Formulated)

Physical state Solid

Appearance Lyophilized, Powder

Color Red

Kit Component 13515: HRP Diluent

Physical state Liquid
Appearance Clear
Color Red
pH 7.4 (20 °C)

Kit Component 52093: Stat3 Rabbit mAb Coated Microwells

Physical state Solid

Appearance Microwell Plate

SECTION 10. Stability and reactivity

Reactivity

No information available.

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

Hazardous reactions None under normal processing. Hazardous polymerization None under normal processing.

Conditions to Avoid

Extremes of temperature and direct sunlight. Exposure to air or moisture over prolonged periods. Over a period of time, sodium azide may react with copper, lead, brass, or solder in plumbing systems to form an accumulation of the HIGHLY EXPLOSIVE compounds of lead azide & copper azide.

Incompatible Materials

Metals, Strong oxidizing agents, strong acids, and strong bases

Hazardous Decomposition Products

Thermal decomposition can lead to release of irritating and toxic gases and vapors, Nitrogen oxides (NOx), Carbon oxides (COx)

SECTION 11. Toxicological information

Information on likely routes of exposure

Product Information

Refer to kit component SDS for full toxicological information. This material should only be handled by, or under the close supervision of, those properly qualified in the handling and use of potentially hazardous chemicals. It should be borne in mind that the toxicological and physiological properties of this compound is not well defined.

<u>Inhalation</u>

Kit Component 84850: Luminol/Enhancer Solution

Inhalation Avoid breathing vapors or mists May cause allergic respiratory reaction

Kit ComponentInhalation
42552: Stable Peroxide Buffer
May cause irritation of respiratory tract

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Kit Component 9801: ELISA Wash Buffer (20X)

Inhalation Avoid breathing vapors or mists May cause irritation of respiratory tract

Kit Component 13149: Phospho-Stat3 (Tyr705) Mouse Detection mAb

Inhalation May cause allergic respiratory reaction

Kit Component 13304: Anti-mouse IgG, HRP-linked Antibody (ELISA Formulated)

Inhalation May cause allergic respiratory reaction

Kit Component 13515: HRP Diluent

Inhalation Avoid breathing vapors or mists May cause irritation of respiratory tract

Eye contact

Kit Component 84850: Luminol/Enhancer Solution

Eye contact Avoid contact with eyes

Kit Component 42552: Stable Peroxide Buffer

Eye contact Expected to be an irritant based on components May cause slight irritation

Kit Component 9801: ELISA Wash Buffer (20X)

Eye contact Expected to be an irritant based on components

Kit Component 9803: Cell Lysis Buffer (10X)

Eye contact Expected to be an irritant based on components

Kit Component 13515: HRP Diluent

Eye contact Contact with eyes may cause irritation

Skin contact

Kit Component 84850: Luminol/Enhancer Solution

Skin contact Avoid contact with skin

Kit Component 42552: Stable Peroxide Buffer

Skin contact Substance may cause slight skin irritation

Kit Component 9801: ELISA Wash Buffer (20X)

Skin contact Repeated or prolonged skin contact may cause allergic reactions with susceptible persons

Expected to be an irritant based on components

Kit Component 13149: Phospho-Stat3 (Tyr705) Mouse Detection mAb

Skin contact Repeated or prolonged skin contact may cause allergic reactions with susceptible persons

Kit Component 13304: Anti-mouse IgG, HRP-linked Antibody (ELISA Formulated)

Skin contact Repeated or prolonged skin contact may cause allergic reactions with susceptible persons

Kit Component 13515: HRP Diluent

Skin contact Repeated or prolonged skin contact may cause allergic reactions with susceptible persons

Ingestion

Kit Component 84850: Luminol/Enhancer Solution

Ingestion Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Kit Component 42552: Stable Peroxide Buffer

Ingestion Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Kit Component 9801: ELISA Wash Buffer (20X)

Ingestion Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Information on toxicological effects

Component Information

Chemical name	LD50 Oral	LD50 Dermal	LC50 Inhalation
polyethylene glycol	= 1700 mg/kg (Rat)	-	-
p-(1,1,3,3-tetramethylbutyl)phenylet	= 1800 mg/kg (Rat)		
her			
Ethylene glycol	= 4700 mg/kg (Rat)	= 10600 mg/kg (Rat)	> 2.5 mg/L (Rat) 6 h
tetrasodium pyrophosphate,	-	> 2000 mg/kg (Rabbit)	-
decahydrate			
ethylenebis(oxyethylenenitrilo)tetra(= 3587 mg/kg (Rat)	-	-
acetic acid)			

sodium azide	= 27 mg/kg (Rat)	= 20 mg/kg (Rabbit) = 50 mg/kg (-
		Rat)	
reaction mass of 5-chloro-2-methyl-4-isothiazolin-3-o ne and 2-methyl-2H -isothiazol-3-one	= 481 mg/kg (Rat) = 120 mg/kg (Rat) = 53 mg/kg (Rat)	= 200 mg/kg (Rabbit) = 87.12 mg/kg (Rabbit)	= 1.23 mg/L (Rat) 4 h = 0.11 mg/L (Rat) 4 h

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Contains kit components which may cause the following effects, refer to individual component SDSs for full information on symptoms. Liquid, aerosols and vapors of this product are irritating and can cause pain, tearing, reddening and swelling accompanied by a stinging sensation and/or a feeling like that of fine dust in the eyes. Contains an animal derived biological. May produce an allergic reaction in susceptible individuals. Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain, or flushing.

Skin and Eye Corrosion/Irritation

Kit Component 9801: ELISA Wash Buffer (20X) Serious eye damage/eye irritation Causes serious eye irritation

Skin corrosion/irritation Causes skin irritation

9803: Cell Lysis Buffer (10X) Kit Component

Serious eye damage/eye irritation Irritating to eyes

Sensitization

Symptoms

Kit Component 9801: ELISA Wash Buffer (20X)

Skin Sensitization Product is or contains a sensitizer. May cause an allergic skin reaction

Kit Component 13149: Phospho-Stat3 (Tyr705) Mouse Detection mAb

Respiratory Sensitization May cause allergy or asthma symptoms or breathing difficulties if inhaled

Skin Sensitization May cause skin sensitization

Kit Component 13304: Anti-mouse IgG, HRP-linked Antibody (ELISA Formulated) Respiratory Sensitization May cause allergy or asthma symptoms or breathing difficulties if inhaled

Skin Sensitization May cause skin sensitization

Kit Component 13515: HRP Diluent

Skin Sensitization Product is or contains a sensitizer. May cause an allergic skin reaction

Mutagenic effects No information available

No component of this product present at levels greater than or equal to 0.1% is identifiable Carcinogenicity

as probable, possible or confirmed carcinogen by IARC, ACGIH, NTP, or OSHA.

Reproductive toxicity No information available.

Systemic Target Organ Toxicity (STOT)

> 84850: Luminol/Enhancer Solution Kit Component

STOT - repeated exposure May cause damage to organs through prolonged or repeated exposure

Target Organ Effects Kidney Aspiration Hazard No information available.

SECTION 12. Ecological information

Ecotoxicity

Product Information Ecotoxicity

Kit Component 9801: ELISA Wash Buffer (20X)

Ecotoxicity Harmful to aquatic life with long lasting effects

Component Information

Chemical name	Toxicity to algae	Toxicity to fish	Toxicity to daphnia and other aquatic invertebrates
polyethylene glycol	-	LC50 8.9 mg/l (Pimephales	EC50 26 mg/l (Daphnia) 48 h
p-(1,1,3,3-tetramethylbutyl)phenylet her		promelas) 96 h	
Ethylene glycol	EC50 6500 - 13000 mg/L	LC50 41000 mg/L (Oncorhynchus	EC50 46300 mg/L (Daphnia magna)
	(Pseudokirchneriella subcapitata) 96 h	mykiss) 96 h LC50 14 - 18 mL/L (Oncorhynchus	48 h
	"	mykiss) 96 h	
		LC50 27540 mg/L (Lepomis	
		macrochirus) 96 h	
		LC50 40761 mg/L (Oncorhynchus	
		mykiss) 96 h	
		LC50 40000 - 60000 mg/L (Pimephales promelas) 96 h	
		LC50 16000 mg/L (Poecilia	
		reticulata) 96 h	
sodium azide	EC50 0.35 mg/L		LC100 1 mg/L (Orconectes rusticus)
	(Pseudokirchneriella subcapitata) 96		96 h
	h	LC50 0.7 mg/L (Lepomis	
		macrochirus) 96 h LC50 5.46 mg/L (Pimephales	
		promelas) 96 h	
reaction mass of	EC50 0.11 - 0.16 mg/L	LC50 1.6 mg/L (Oncorhynchus	EC50 4.71 mg/L (Daphnia magna)
	(Pseudokirchneriella subcapitata) 72	mykiss) 96 h	48 h
ne and 2-methyl-2H	h		EC50 0.12 - 0.3 mg/L (Daphnia
-isothiazol-3-one	EC50 0.03 - 0.13 mg/L		magna) 48 h
	(Pseudokirchneriella subcapitata) 96		EC50 0.71 - 0.99 mg/L (Daphnia
	[1]		magna) 48 h

Persistence and degradability

Kit Component 9801: ELISA Wash Buffer (20X)

Persistence and degradability Not readily biodegradable

Bioaccumulation

Kit ComponentBioaccumulation

9801: ELISA Wash Buffer (20X)
Not likely to bioaccumulate

Chemical name	Octanol-Water Partition Coefficient	
Ethylene glycol	-1.36	
reaction mass of 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-2H	>=-0.32 - <=0.7	
-isothiazol-3-one		

Mobility

Kit Component 9801: ELISA Wash Buffer (20X)

Mobility Will likely be mobile in the environment due to its water solubility

Other adverse effects

No information available.

SECTION 13. Disposal considerations

Waste Disposal Methods

Should not be released into the environment.

Disposal considerations

Do not empty into drains; dispose of this material and its container in a safe way. Dispose of wastes in an approved waste disposal facility.

SECTION 14. Transport information

This material is not subject to regulation as a hazardous material for shipping.

SECTION 15. Regulatory information

North American Inventory Listing

Chemical name	TSCA 8(b)	TSCA 12(b)	DSL	NDSL
polyethylene glycol	Listed	Not Listed	Listed	Not Listed
p-(1,1,3,3-tetramethylbutyl)phen				
ylether				
Ethylene glycol	Listed	Not Listed	Listed	Not Listed
ethylenebis(oxyethylenenitrilo)te	Listed	Not Listed	Listed	Not Listed
tra(acetic acid)				
sodium azide	Listed	Not Listed	Listed	Not Listed
reaction mass of	Not Listed	Section 5(a)(2): 1 %	Listed	Not Listed
5-chloro-2-methyl-4-isothiazolin-				
3-one and 2-methyl-2H				
-isothiazol-3-one				

SARA 313

Refer to kit component SDS for full SARA Section 313 reporting requirements.

Chemical name	CAS No	SARA 313 - Threshold Values %
Ethylene glycol	107-21-1	1.0
sodium azide	26628-22-8	1.0
trisodium tetraoxovanadate	13721-39-6	1.0
Magnesium nitrate	10377-60-3	1.0
copper dinitrate	3251-23-8	1.0

SARA 311/312 Hazard Categories

Acute Health HazardYesChronic Health HazardYesFire HazardNoSudden Release of Pressure HazardNoReactive HazardNo

Clean Water Act

Refer to kit component SDS for full Clean Water Act (CWA) reporting requirements.

CERCLA

Refer to kit component SDS for full Comprehensive Environmental Response Compensation and Liability Act (CERCLA) reporting requirements.

Chemical name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	
Ethylene glycol	5000 lb	Not Listed	
sodium azide	1000 lb	1000 lb	

California Proposition 65

This product does not contain any Proposition 65 chemicals.

Chemical name	California Prop. 65	
Ethylene glycol	Developmental	

U.S. State Right-to-Know Regulations

Refer to kit component SDS for applicable State Right-To-Know (RTK) information.

Chemical name	New Jersey	Massachusetts	Pennsylvania
water	Not Listed	Not Listed	Listed
Ethylene glycol	Listed	Listed	Listed
disodium hydrogenorthophosphate	Listed	Listed	Listed
tetrasodium pyrophosphate, decahydrate	Listed	Listed	Listed
sodium azide	Listed	Listed	Listed
trisodium tetraoxovanadate	Listed	Not Listed	Not Listed
FD&C Blue 1	Not Listed	Listed	Not Listed
Magnesium nitrate	Listed	Listed	Listed
copper dinitrate	Listed	Listed	Listed

SECTION 16. Other information

Issuing Date: 2018-01-19 **Revision Date:** 2025-02-19

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet