



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

**Issuing Date:** 2018-01-19

**Revision Date:** 2024-07-10

**Version:** 2

## SECTION 1. Identification

### Product identifier

**Product No** 64740  
**Product name** PathScan® Phospho-FGF Receptor 3 (panTyr)  
Chemiluminescent Sandwich ELISA Kit

**Kit Component**  
67593: FGFR3 Rabbit mAb Coated Microwells  
12982: Phospho Tyrosine Mouse Detection mAb  
13304: Anti-mouse IgG, HRP-linked Antibody (ELISA Formulated)  
84850: Luminol/Enhancer Solution  
42552: Stable Peroxide Buffer  
9801: ELISA Wash Buffer (20X)  
9803: Cell Lysis Buffer (10X)  
11083: ELISA Sample Diluent  
13339: Detection Antibody Diluent  
13515: HRP Diluent

### 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.  
3 Trask Lane  
Danvers, MA 01923  
United States  
TEL: +1 978 867 2300  
FAX: +1 978 867 2400  
**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)

<b>Skin corrosion/irritation</b>	Category 2
<b>Serious eye damage/eye irritation</b>	Category 1



This product is considered a treated article that incorporates a biocidal product as a preservative with the following active ingredient: Mixture of 5-chloro-2-methyl-2H- isothiazol-3-one (EINECS 247-500-7) and 2-methyl-2H-isothiazol-3-one (EINECS 220-239-6) (Mixture of CMIT/MIT)

**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

Polyethylene glycol p-(1,1,3,3-tetramethylbutyl)phenylether is a suspected endocrine disruptor

**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: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H -isothiazol-3-one [EC no. 220-239-6] (3:1)	55965-84-9	0.005-0.025

This product is considered a treated article that incorporates a biocidal product as a preservative with the following active ingredient: Mixture of 5-chloro-2-methyl-2H- isothiazol-3-one (EINECS 247-500-7) and 2-methyl-2H-isothiazol-3-one (EINECS 220-239-6) (Mixture of CMIT/MIT)

**Kit Component**  
**67593: FGFR3 Rabbit mAb Coated Microwells**  
**12982: Phospho Tyrosine Mouse Detection mAb**  
**13304: Anti-mouse IgG, HRP-linked Antibody (ELISA Formulated)**  
**42552: Stable Peroxide Buffer**

This product does not contain substances at concentrations requiring disclosure under 29 CFR 1910.1200 (OSHA Hazard Communication Standard).

## SECTION 4. First-aid measures

<b>Eye contact</b>	In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
<b>Skin contact</b>	Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. If skin irritation or rash occurs: Get medical advice/attention.
<b>Inhalation</b>	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.
<b>Ingestion</b>	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**

<b>General advice</b>	For further assistance, contact your local Poison Control Center.
<b>Protection of first-aiders</b>	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves

**SECTION 5. Fire-fighting measures**

**Extinguishing media**

<b>Suitable Extinguishing Media</b>	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment
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**Specific hazards arising from the chemical**

No information available.

**Explosion Data**

<b>Sensitivity to Mechanical Impact</b>	None
<b>Sensitivity to Static Discharge</b>	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**

<b>For non-emergency personnel</b>	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.
<b>Other information</b>	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**

<b>Methods for containment</b>	Prevent further leakage or spillage if safe to do so.
<b>Methods for cleaning up</b>	Dike 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

<b>Technical measures/Storage conditions</b>	Keep away from direct sunlight. Keep containers tightly closed in a dry, cool and well-ventilated place.
<b>Packaging material</b>	No information available
<b>Incompatible products</b>	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	Ceiling: 100 mg/m <sup>3</sup>	-	-
tetrasodium pyrophosphate, decahydrate	-	-	TWA : 5 mg/m <sup>3</sup>
sodium azide	Ceiling: 0.29 mg/m <sup>3</sup> Ceiling: 0.11 ppm	-	Ceiling: 0.1 ppm Ceiling: 0.3 mg/m <sup>3</sup>

### 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.

<b>Eye/face protection</b>	Tightly fitting safety goggles.
<b>Skin and body protection</b>	Lightweight protective clothing. Impervious gloves.
<b>Respiratory protection</b>	In case of inadequate ventilation wear respiratory protection.
<b>Hygiene measures</b>	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

<b>Kit Component</b>	<b>84850: Luminol/Enhancer Solution</b>
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 12982: Phospho Tyrosine 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 67593: FGFR3 Rabbit mAb Coated Microwells**  
Physical state Solid

## SECTION 10. Stability and reactivity

### Reactivity

No information available.

**Chemical stability**

Stable under recommended storage conditions.

**Possibility of hazardous reactions**

<b>Hazardous reactions</b>	None under normal processing.
<b>Hazardous polymerization</b>	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

**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.

**Inhalation**

<b>Kit Component</b> Inhalation	<b>84850: Luminol/Enhancer Solution</b> Avoid breathing vapors or mists May cause allergic respiratory reaction
<b>Kit Component</b> Inhalation	<b>42552: Stable Peroxide Buffer</b> May cause irritation of respiratory tract
<b>Kit Component</b> Inhalation	<b>9801: ELISA Wash Buffer (20X)</b> Avoid breathing vapors or mists May cause irritation of respiratory tract
<b>Kit Component</b> Inhalation	<b>12982: Phospho Tyrosine Mouse Detection mAb</b> May cause allergic respiratory reaction
<b>Kit Component</b> Inhalation	<b>13304: Anti-mouse IgG, HRP-linked Antibody (ELISA Formulated)</b> May cause allergic respiratory reaction
<b>Kit Component</b> Inhalation	<b>13515: HRP Diluent</b> Avoid breathing vapors or mists May cause irritation of respiratory tract

**Eye contact**

<b>Kit Component</b> Eye contact	<b>84850: Luminol/Enhancer Solution</b> Avoid contact with eyes
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<b>Kit Component</b> Eye contact	<b>42552: Stable Peroxide Buffer</b> Expected to be an irritant based on components May cause slight irritation
<b>Kit Component</b> Eye contact	<b>9801: ELISA Wash Buffer (20X)</b> Expected to be an irritant based on components
<b>Kit Component</b> Eye contact	<b>9803: Cell Lysis Buffer (10X)</b> Expected to be an irritant based on components
<b>Kit Component</b> Eye contact	<b>13515: HRP Diluent</b> Contact with eyes may cause irritation

**Skin contact**

<b>Kit Component</b> Skin contact	<b>84850: Luminol/Enhancer Solution</b> Avoid contact with skin
<b>Kit Component</b> Skin contact	<b>42552: Stable Peroxide Buffer</b> Substance may cause slight skin irritation
<b>Kit Component</b> Skin contact	<b>9801: ELISA Wash Buffer (20X)</b> Repeated or prolonged skin contact may cause allergic reactions with susceptible persons Expected to be an irritant based on components
<b>Kit Component</b> Skin contact	<b>12982: Phospho Tyrosine Mouse Detection mAb</b> Repeated or prolonged skin contact may cause allergic reactions with susceptible persons
<b>Kit Component</b> Skin contact	<b>13304: Anti-mouse IgG, HRP-linked Antibody (ELISA Formulated)</b> Repeated or prolonged skin contact may cause allergic reactions with susceptible persons
<b>Kit Component</b> Skin contact	<b>13515: HRP Diluent</b> Repeated or prolonged skin contact may cause allergic reactions with susceptible persons

**Ingestion**

<b>Kit Component</b> Ingestion	<b>84850: Luminol/Enhancer Solution</b> Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea
<b>Kit Component</b> Ingestion	<b>42552: Stable Peroxide Buffer</b> Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea
<b>Kit Component</b> Ingestion	<b>9801: ELISA Wash Buffer (20X)</b> 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 p-(1,1,3,3-tetramethylbutyl)phenylet her	= 1800 mg/kg (Rat)	-	-
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 [EC no. 247-500-7] and 2-methyl-2H -isothiazol-3-one [EC	= 53 mg/kg (Rat) = 481 mg/kg (Rat) 232 - 249 mg/kg (Rat) = 120 mg/kg (Rat)	= 200 mg/kg (Rabbit)	= 1.23 mg/L (Rat) 4 h = 0.11 mg/L (Rat) 4 h



**Ecotoxicity****Product Information****Ecotoxicity****Kit Component**

Ecotoxicity

**9801: ELISA Wash Buffer (20X)**

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 p-(1,1,3,3-tetramethylbutyl)phenylether	-	LC50 8.9 mg/l (Pimephales promelas) 96 h	EC50 26 mg/l (Daphnia) 48 h
Ethylene glycol	EC50 6500 - 13000 mg/L (Pseudokirchneriella subcapitata) 96 h	LC50 40761 mg/L (Oncorhynchus mykiss) 96 h LC50 27540 mg/L (Lepomis macrochirus) 96 h LC50 41000 mg/L (Oncorhynchus mykiss) 96 h LC50 14 - 18 mL/L (Oncorhynchus mykiss) 96 h LC50 40000 - 60000 mg/L (Pimephales promelas) 96 h LC50 16000 mg/L (Poecilia reticulata) 96 h	EC50 46300 mg/L (Daphnia magna) 48 h
sodium azide	EC50 0.35 mg/L (Pseudokirchneriella subcapitata) 96 h	LC50 0.8 mg/L (Oncorhynchus mykiss) 96 h LC50 5.46 mg/L (Pimephales promelas) 96 h LC50 0.7 mg/L (Lepomis macrochirus) 96 h	LC100 1 mg/L (Orconectes rusticus) 96 h
reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)	EC50 0.11 - 0.16 mg/L (Pseudokirchneriella subcapitata) 72 h EC50 0.31 mg/L (Anabaena flos-aquae) 120 h EC50 0.03 - 0.13 mg/L (Pseudokirchneriella subcapitata) 96 h	LC50 1.6 mg/L (Oncorhynchus mykiss) 96 h	EC50 4.71 mg/L (Daphnia magna) 48 h EC50 0.71 - 0.99 mg/L (Daphnia magna) 48 h EC50 0.12 - 0.3 mg/L (Daphnia magna) 48 h

**Persistence and degradability****Kit Component**

Persistence and degradability

**9801: ELISA Wash Buffer (20X)**

Not readily biodegradable

**Bioaccumulation****Kit Component**

Bioaccumulation

**9801: ELISA Wash Buffer (20X)**

Not likely to bioaccumulate

Chemical name	Octanol-Water Partition Coefficient
Ethylene glycol	-1.93

**Mobility****Kit Component**

Mobility

**9801: ELISA Wash Buffer (20X)**

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 p-(1,1,3,3-tetramethylbutyl)phenylether	Listed	Not Listed	Listed	Not Listed
Ethylene glycol	Listed	Not Listed	Listed	Not Listed
ethylenebis(oxyethylenenitrilo)tetra(acetic acid)	Listed	Not Listed	Listed	Not Listed
sodium azide	Listed	Not Listed	Listed	Not Listed
reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H -isothiazol-3-one [EC no. 220-239-6] (3:1)	Not Listed	Section 5: 1 %	Listed	Not Listed

**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
trisodium tetraoxovanadate	13721-39-6	1.0
sodium azide	26628-22-8	1.0
magnesium nitrate	10377-60-3	1.0
copper dinitrate	3251-23-8	1.0

**SARA 311/312 Hazard Categories**

Acute Health Hazard	Yes
Chronic Health Hazard	Yes
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

**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.

**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
Ethylene glycol	Listed	Listed	Listed
disodium hydrogenorthophosphate	Listed	Listed	Listed
tetrasodium pyrophosphate, decahydrate	Listed	Listed	Listed
trisodium tetraoxovanadate	Listed	Not Listed	Not Listed
sodium azide	Listed	Listed	Listed
magnesium nitrate	Listed	Listed	Listed
copper dinitrate	Listed	Listed	Listed

<b>SECTION 16. Other information</b>
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**Issuing Date:** 2018-01-19

**Revision Date:** 2024-07-10

**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