



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

Issuing Date: 2018-12-13

Version: 1

SECTION 1. Identification

Product identifier

Product No	9384
Product name	Cytokeratin Antibody Sampler Kit
Kit Component	4465: Keratin 7 (D1E4) XP® Rabbit mAb 4543: Keratin 17 (D73C7) Rabbit mAb 4548: Keratin 18 (DC10) Mouse mAb 4546: Keratin 8/18 (C51) Mouse mAb 4558: Keratin 19 (BA17) Mouse mAb 4545: Pan-Keratin (C11) Mouse mAb 7076: Anti-mouse IgG, HRP-linked Antibody 7074: Anti-rabbit IgG, HRP-linked Antibody

Recommended use of the chemical and restrictions on use

Identified uses	This product is intended for research purposes only.
<u>Manufacturer, importer, supplier</u>	
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 not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

GHS Label elements, including precautionary statements

Signal Word

None.

Hazard statement(s)

None.

Precautionary Statement(s)

None.

Supplementary Hazard Information

No information available.

Hazards not otherwise classified (HNOC)

Not applicable.

SECTION 3. Composition/information on ingredients

Kit Component

The following kit components contain the ingredients listed in the table below:

4465: Keratin 7 (D1E4) XP® Rabbit mAb
 4543: Keratin 17 (D73C7) Rabbit mAb
 4548: Keratin 18 (DC10) Mouse mAb
 4546: Keratin 8/18 (C51) Mouse mAb
 4558: Keratin 19 (BA17) Mouse mAb
 4545: Pan-Keratin (C11) Mouse mAb

Chemical name	CAS No.	Weight-%
glycerol	56-81-5	30-60
sodium azide	26628-22-8	<0.02

Kit Component

The following kit components contain the ingredients listed in the table below:

7076: Anti-mouse IgG, HRP-linked Antibody
 7074: Anti-rabbit IgG, HRP-linked Antibody

Chemical name	CAS No.	Weight-%
glycerol	56-81-5	30-60

SECTION 4. First-aid measures

Eye contact

Rinse thoroughly with plenty of water, also under the eyelids. Keep eye wide open while rinsing. Get medical attention immediately if irritation persists.

Skin contact

Wash skin with soap and water.

Inhalation

IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Get medical attention immediately if symptoms occur.

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

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.

Unsuitable Extinguishing Media None.

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 Avoid contact with skin, eyes and clothing. Use personal protective equipment. For personal protection see section 8.

Other information No information available.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Prevent entry into waterways, sewers, basements or confined areas.

Methods and material for containment and cleaning up

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

Methods for cleaning up Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.

SECTION 7. Handling and storage**Precautions for safe handling**

Wear personal protective equipment. See section 8. Avoid contact with skin, eyes and clothing. Remove and wash contaminated clothing before re-use.

Conditions for safe storage, including any incompatibilities

Technical measures/Storage conditions Keep containers tightly closed in a dry, cool and well-ventilated place.

Packaging material No information available.

Incompatible products Strong oxidizing agents, Strong acids.

SECTION 8. Exposure controls/personal protection**Control parameters**

Chemical name	ACGIH TLV	OSHA PEL	NIOSH REL
glycerol	-	TWA mist, total particulate: 15 mg/m ³	-

		TWA mist, respirable fraction: 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.

Eye/face protection

Safety glasses with side-shields.

Skin and body protection

Wear protective gloves/clothing.

Respiratory protection

If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice.

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****4465: Keratin 7 (D1E4) XP® Rabbit mAb**

Physical state

Liquid

Appearance

Clear

Color

Colorless

pH VALUE

7.5

Remarks

@ 20 °C

Kit Component**4543: Keratin 17 (D73C7) Rabbit mAb**

Physical state

Liquid

Appearance

Clear

Color

Colorless

pH VALUE

7.5

Remarks

@ 20 °C

Kit Component**4548: Keratin 18 (DC10) Mouse mAb**

Physical state

Liquid

Appearance

Clear

Color

Colorless

pH VALUE

7.5

Remarks

@ 20 °C

Kit Component**4546: Keratin 8/18 (C51) Mouse mAb**

Physical state

Liquid

Appearance

Clear

Color

Colorless

pH VALUE

7.5

Remarks

@ 20 °C

Kit Component**4558: Keratin 19 (BA17) Mouse mAb**

Physical state

Liquid

Appearance

Clear

Color	Colorless
pH VALUE	7.5
Remarks	@ 20 °C

Kit Component **4545: Pan-Keratin (C11) Mouse mAb**

Physical state	Liquid
Appearance	Clear
Color	Colorless
pH VALUE	7.5
Remarks	@ 20 °C

Kit Component **7076: Anti-mouse IgG, HRP-linked Antibody**

Physical state	Liquid
Appearance	Clear
Color	Colorless
pH VALUE	7.5
Remarks	@ 20 °C

Kit Component **7074: Anti-rabbit IgG, HRP-linked Antibody**

Physical state	Liquid
Appearance	Clear
Color	Colorless
pH VALUE	7.5
Remarks	@ 20 °C

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. 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

Strong oxidizing agents. Strong acids.

Hazardous Decomposition Products

Nitrogen oxides (NO_x).

SECTION 11. Toxicological information**Information on likely routes of exposure****Product 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	Avoid breathing vapors or mists May cause irritation of respiratory tract
Eye contact	Avoid contact with eyes May cause slight irritation
Skin contact	Avoid contact with skin
Ingestion	Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea

Information on toxicological effects**Component Information**

Chemical name	LD50 Oral	LD50 Dermal	LC50 Inhalation
glycerol	= 12600 mg/kg (Rat)	> 10 g/kg (Rabbit)	> 570 mg/m ³ (Rat) 1 h
sodium azide	= 27 mg/kg (Rat)	= 20 mg/kg (Rabbit) = 50 mg/kg (Rat)	-

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

Symptoms	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	No information available
Sensitization	No information available
Mutagenic effects	No information available
Carcinogenicity	No component of this product present at levels greater than or equal to 0.1% is identifiable as probable, possible or confirmed carcinogen by IARC, ACGIH, NTP, or OSHA.
Reproductive toxicity	No information available.
Systemic Target Organ Toxicity (STOT)	No information available
Aspiration Hazard	No information available.

SECTION 12. Ecological information**Ecotoxicity**

Product Information	No information available
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Component Information

Chemical name	Toxicity to algae	Toxicity to fish	Toxicity to daphnia and other aquatic invertebrates
glycerol	-	LC50 51 - 57 mL/L (Oncorhynchus mykiss) 96 h	EC50 500 mg/L (Daphnia magna) 24 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

Persistence and degradability	No information available
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Bioaccumulation

Chemical name	Octanol-Water Partition Coefficient
glycerol	-1.76

Mobility No information available

Other adverse effects

No information available.

SECTION 13. Disposal considerations**Waste Disposal Methods**

Dispose of in accordance with all applicable national environmental laws and regulations.

Disposal considerations

Do not empty into drains; dispose of this material and its container in a safe way.

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**

Refer to kit component SDS for full Toxic Substance Control Act (TSCA) reporting requirements.

Chemical name	TSCA 8(b)	TSCA 12(b)	DSL	NDSL
glycerol	Listed	Not Listed	Listed	Not Listed
sodium azide	Listed	Not Listed	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 %
sodium azide	26628-22-8	1.0

SARA 311/312 Hazard Categories

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

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

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
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
glycerol	Listed	Listed	Listed
sodium azide	Listed	Listed	Listed

SECTION 16. Other information

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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