

**Product name** Phospho-(Ser/Thr) Akt Substrate Antibody**(M)SDS Number** 9611**Version** 1**Issuing Date:** 2023-11-20**1. Identification****Product identifier****Product name** Phospho-(Ser/Thr) Akt Substrate Antibody**Other means of identification****(M)SDS Number** 9611**Contains**

Chemical name	English chemical name	CAS No
glycerol	Glycerol	56-81-5

**Details of the supplier of the safety data sheet****Manufacturer**Cell Signaling Technology, Inc.  
3 Trask Lane  
Danvers, MA 01923  
United States  
TEL: +1 978 867 2300  
FAX: +1 978 867 2400**Importer**Cell Signaling Technology, Inc.  
Building 7  
A-SUN Science & Technology Park  
399 Shengxia Road  
Pudong Shanghai 201210  
China  
TEL: 4006-473287  
FAX: (86) 21-5835-6116**Supplier**

No information available

**E-mail address** support@cellsignal.com**Emergency telephone number****Emergency telephone** 400 120 4937**Recommended use of the chemical and restrictions on use****Identified uses** For Research Use Only. Not for Use in Diagnostic Procedures.**Restrictions on use** No information available**2. Hazard(s) identification****Emergency Overview**

Not a hazardous substance or mixture according to the Globally Harmonized System (GHS)

**Appearance** Clear / Colorless**Physical state** Liquid**Odor** No information available

### **Classification of the substance or mixture**

Not a hazardous substance or mixture according to the Globally Harmonized System (GHS)

### **Label elements**

#### **Signal Word**

None

#### **Hazard Statements**

None

#### **Physical and chemical hazards**

Not applicable.

#### **Health hazards**

Immediate Health Effects: Not applicable.

Chronic effects: Not applicable.

#### **Environmental hazards**

Not applicable.

#### **Other hazards which do not result in classification**

Not applicable.

## **3. Composition/information on ingredients**

**Chemical nature** Mixture

Not a hazardous substance or mixture according to the Globally Harmonized System (GHS).

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

## **4. First-aid measures**

### **Description of necessary first aid measures**

<b>Inhalation</b>	Remove to fresh air.
<b>Inhalation</b>	Move to fresh air.
<b>Eye contact</b>	Rinse thoroughly with plenty of water, also under the eyelids.
<b>Skin contact</b>	Wash skin with soap and water.
<b>Ingestion</b>	Clean mouth with water and afterwards drink plenty of water.
<b><u>Most important symptoms/effects, acute and delayed</u></b>	No information available.
<b><u>For emergency responders</u></b>	No information available.
<b><u>Note to physicians</u></b>	Treat symptomatically.

## 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** No information available.

**Specific hazards arising from the chemical** No information available

**Special protective actions for fire-fighters** Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

## 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

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

**For emergency responders** Use personal protection recommended in Section 8.

**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** Prevent further leakage or spillage if safe to do so. Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.

**Precautions to prevent secondary hazards** Clean contaminated objects and areas thoroughly observing environmental regulations.

## 7. Handling and storage

**Precautions for safe handling** Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. See Section 8 for information on appropriate personal protective equipment.

**Conditions for safe storage, including any incompatibilities** Keep containers tightly closed in a dry, cool and well-ventilated place.

**Incompatible materials** None known based on information supplied.

## 8. Exposure controls/personal protection

### Occupational exposure limits

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

**Note** See section 16 for terms and abbreviations

### Biological occupational exposure limits

No data available

#### **Monitoring and observation processes**

No applicable information was found.

#### **Engineering controls**

Showers  
Eyewash stations  
Ventilation systems

#### **Individual protection measures, such as personal protective equipment**

<b>Eye/face protection</b>	Tight sealing safety goggles.
<b>Skin and body protection</b>	Wear suitable protective clothing.
<b>Hand protection</b>	Impervious gloves.
<b>Respiratory protection</b>	When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.
<b>General hygiene considerations</b>	Handle in accordance with good industrial hygiene and safety practice.

### **9. Physical and chemical properties**

#### **Information on basic physical and chemical properties**

<b>Appearance</b>	Clear
<b>Color</b>	Colorless
<b>Physical state</b>	Liquid
<b>Odor</b>	No information available
<b>Odor Threshold</b>	No information available

<b><u>Property</u></b>	<b><u>Values</u></b>	<b><u>Remarks • Method</u></b>
<b>pH</b>	7.5	@ 20 °C
<b>Melting point/freezing point</b>	no data available	None known
<b>Boiling point or initial boiling point and boiling range</b>	no data available	None known
<b>Flash point</b>	no data available	None known
<b>Evaporation rate</b>	no data available	None known
<b>Flammability</b>	no data available	None known
<b>Flammability Limits in Air</b>		None known
<b>Upper flammability limit</b>	no data available	
<b>Lower flammability limit</b>	no data available	
<b>Vapor pressure</b>	no data available	None known
<b>Relative vapor density</b>	No data available	None known
<b>Relative density</b>	no data available	None known
<b>Solubility</b>	no data available	None known
<b>Solubility in other solvents</b>	no data available	None known
<b>Partition coefficient: n-octanol/water</b>	no data available	None known
<b>Autoignition temperature</b>	no data available	None known
<b>Decomposition temperature</b>	no data available	None known
<b>Viscosity</b>	no data available	None known
<b>Viscosity, dynamic</b>	no data available	None known

**Additional information**

Explosive properties No information available  
Oxidizing properties No information available

## 10. Stability and reactivity

**Stability** Stable under normal conditions.

**Possibility of hazardous reactions** None under normal processing.

**Conditions to Avoid** Extremes of temperature and direct sunlight.

**Incompatible products** No information available.

**Hazardous Decomposition Products** None known based on information supplied.

## 11. Toxicological information

**Acute Toxicity**

**Numerical measures of toxicity**

No information available

Chemical name	LD50 Oral	LD50 Dermal	LC50 Inhalation
glycerol	= 12600 mg/kg (Rat)	> 10 g/kg (Rabbit)	> 570 mg/m <sup>3</sup> (Rat) 1 h

**Skin corrosion/irritation** No information available.

**Serious eye damage/eye irritation** No information available.

**Respiratory or skin sensitization** No information available

**Mutagenic effects** No information available.

**Carcinogenicity** No information available.

**Reproductive toxicity** No information available.

**Specific target organ toxicity (single exposure)** No information available

**Specific target organ toxicity (repeated exposure)** No information available

**Aspiration hazard** No information available.

## 12. Ecological information

**Ecotoxicity** The environmental impact of this product has not been fully investigated.

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

		(Oncorhynchus mykiss) 96 h	magna) 24 h
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**Persistence and degradability** No information available.

**Bioaccumulative potential**

Chemical name	Octanol-Water Partition Coefficient
glycerol	-1.76

**Mobility in soil** No information available.

### 13. Disposal considerations

**Waste chemicals** Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

**Contaminated packaging** Do not reuse empty containers.

### 14. Transport information

**IMDG/IMO** Not regulated

**IATA** Not regulated

**China** Not regulated

**Special precautions for user**

Please refer to the applicable dangerous goods regulations for additional information

### 15. Regulatory information

**Safety, health and environmental regulations/legislation specific for the substance or mixture**

**National regulations**

**Law of the People's Republic of China on Prevention and Control of Occupational Diseases**

Catalog of occupational hazard factors:	Not applicable.
Catalog of occupational diseases:	Not applicable.

**Regulations on the Control over Safety of Hazardous Chemicals**

<u>Inventory of hazardous chemicals</u>	Not applicable.
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<u>GB 18218-2009 Identification of major hazard installations for dangerous chemicals</u>	Not applicable
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<b>List of hazardous chemicals under priority management</b>	Not applicable
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**Regulations on Labor Protection in Workplaces Where Toxic Substances Are Used**

Inventory of highly toxic goods	Not applicable
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**Regulations for Environmental Management on the First Import of Chemicals and the Import and Export of Toxic Chemicals**

List of toxic chemicals severely restricted for import and export in China	Not applicable
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**Measures for the Environmental Management of New Chemical Substances**  
**IECSC - China Inventory of Existing Chemical Substances** Contact supplier for inventory compliance status.

#### International Regulations

**The Montreal Protocol on Substances that Deplete the Ozone Layer** Not applicable

**The Stockholm Convention on Persistent Organic Pollutants** Not applicable

**The Rotterdam Convention** Not applicable

### 16. Other information

**Issuing Date:** 2023-11-20

**Revision Note** The symbol (\*) in the margin of this SDS indicates that this line has been revised.

#### **Abbreviations and acronyms**

**Legend** Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA:	Time weighted average	STEL:	Short term exposure limit
Ceiling:	Maximum limit value:	*	Skin designation
C	Carcinogen		

#### **Key literature references and sources for data used to compile the SDS**

Agency for Toxic Substances and Disease Registry (ATSDR)  
U.S. Environmental Protection Agency ChemView Database  
European Food Safety Authority (EFSA)  
EPA (Environmental Protection Agency)  
Acute Exposure Guideline Level(s) (AEGL(s))  
U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act  
U.S. Environmental Protection Agency High Production Volume Chemicals  
Food Research Journal  
Hazardous Substance Database  
International Uniform Chemical Information Database (IUCLID)  
Japan GHS Classification  
Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)  
NIOSH (National Institute for Occupational Safety and Health)  
National Library of Medicine's ChemID Plus (NLM CIP)  
National Library of Medicine's PubMed database (NLM PUBMED)  
National Toxicology Program (NTP)  
New Zealand's Chemical Classification and Information Database (CCID)  
Organization for Economic Co-operation and Development Environment, Health, and Safety Publications  
Organization for Economic Co-operation and Development High Production Volume Chemicals Program  
Organization for Economic Co-operation and Development Screening Information Data Set  
RTECS (Registry of Toxic Effects of Chemical Substances)  
World Health Organization

#### **Disclaimer**

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**End of Safety Data Sheet**