

**Safety Data Sheet (SDS)** According to the REACH Regulation (EC) No. 1907/2006

Issuing Date: 2018-11-06

Version: 1

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1. Product identifier

**Product No** 5012  
**Product name** Phospho-Akt (Ser473) (D9E) XP® Rabbit mAb (Biotinylated)

**Reach registration number** This substance/mixture contains only ingredients which have been registered, or are exempt from registration, according to Regulation (EC) No. 1907/2006.

### Contains

Chemical name	Index No.	CAS No.
glycerol (30-60)	Not Listed	56-81-5

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

**Identified uses** For research use only

### 1.3. Details of the supplier of the safety data sheet

Importer (Applicable in EU only)	Manufacturer
Cell Signaling Technology Europe B.V. Dellaertweg 9b 2316 WZ Leiden The Netherlands TEL: +31 (0)71 7200 200 FAX: +31 (0)71 891 0019	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](http://www.cellsignal.com)  
**E-mail Address** [info@cellsignal.eu](mailto:info@cellsignal.eu)

### 1.4. Emergency telephone number

**CHEMTREC** 24 hours a day, 7 days a week, 365 days a year  
+1 703 527 3887 (INTERNATIONAL) +1 800 424 9300 (NORTH AMERICA)

**Europe** 112

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

**Regulation (EC) No. 1272/2008**

This substance is classified as not hazardous according to regulation (EC) 1272/2008 [CLP]

**2.2. Label elements**

**Supplemental hazard statement(s)**

EUH210 - Safety data sheet available on request

**2.3. Other hazards**

May produce an allergic reaction.

*For the full text of the H-phrases & EUH-phrases mentioned in this Section, see Section 16*

**SECTION 3: Composition/information on ingredients**

Chemical name	CAS No.	Weight-%	EC No	Classification (1272/2008)	REACH Registration Number
glycerol	56-81-5	30-60	200-289-5	-	no data available

*For the full text of the H-phrases & EUH-phrases mentioned in this Section, see Section 16*

**SECTION 4: First aid measures**

**4.1. Description of first aid measures**

<b>General advice</b>	Use first aid treatment according to the nature of the injury. When symptoms persist or in all cases of doubt seek medical advice.
<b>Inhalation</b>	Move to fresh air.
<b>Skin contact</b>	Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes.
<b>Eye contact</b>	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.
<b>Ingestion</b>	Clean mouth with water and afterwards drink plenty of water.

**4.2. 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.

**4.3. Indication of any immediate medical attention and special treatment needed**

**Notes to physician** Treat symptomatically.

**SECTION 5: Firefighting measures**

**5.1. Extinguishing media**

**Suitable Extinguishing Media** Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.  
**Unsuitable Extinguishing Media** None.

**5.2. Special hazards arising from the substance or mixture**

Thermal decomposition can lead to release of irritating gases and vapors.

**5.3. Advice for firefighters**

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Wear self-contained breathing apparatus and protective suit. Use personal protective equipment.

### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

**For non-emergency personnel** Avoid contact with skin, eyes and clothing. Use personal protective equipment.  
**For emergency responders** Use personal protection recommended in Section 8.

#### 6.2. 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.

#### 6.3. 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.

#### 6.4. Reference to other sections

See Sections 8 & 13 for additional information.

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Remove and wash contaminated clothing before re-use. Handle in accordance with good industrial hygiene and safety practice.

#### 7.2. Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place.

#### 7.3. Specific end use(s)

Use as a laboratory reagent.

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

Chemical name	European Union	United Kingdom	France	Spain	Germany
glycerol		STEL 30 mg/m <sup>3</sup> TWA 10 mg/m <sup>3</sup>	TWA 10 mg/m <sup>3</sup>	TWA 10 mg/m <sup>3</sup>	Ceiling / Peak: 400 mg/m <sup>3</sup> TWA: 200 mg/m <sup>3</sup>
Chemical name	Italy	Portugal	Netherlands	Finland	Denmark
glycerol		TWA 10 mg/m <sup>3</sup>		TWA 20 mg/m <sup>3</sup>	
Chemical name	Austria	Switzerland	Poland	Norway	Ireland
glycerol		SS-C** TWA 50 mg/m <sup>3</sup> STEL 100 mg/m <sup>3</sup>	TWA 10 mg/m <sup>3</sup>		TWA 10 mg/m <sup>3</sup> STEL 30 mg/m <sup>3</sup>

#### 8.2. Exposure controls

**Appropriate engineering controls**  
Showers, eyewash stations, and ventilation systems.

**Individual protection measures, such as personal protective equipment**  
**Eye/face protection** Safety glasses with side-shields

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### Skin protection

Hand protection

Other

### Respiratory protection

Impervious gloves.

Wear suitable protective clothing.

When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

### Environmental Exposure Controls

No information available.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	Liquid
Appearance	Clear
Color	Colorless
Odor	No information available
Odor Threshold	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	7.4	@ 20 °C
Melting point/freezing point		No information available
Initial boiling point and boiling range		No information available
Flash point		No information available.
Evaporation rate		No information available
Flammability (solid, gas)		No information available
Upper flammability limit		No information available
Lower flammability limit		No information available
Vapor pressure		No information available
Vapor density		No information available
Relative density		No information available
Solubility		No information available
Partition coefficient: n-octanol/water		No information available
Autoignition temperature		No information available
Decomposition temperature		No information available.
Viscosity		No information available
Explosive properties		No information available
Oxidizing properties		No information available

### 9.2. Other information

Softening point	No information available
Molecular Weight	No information available
Solubility in other solvents	No information available
VOC content	No information available
Liquid Density	No information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No information available.

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

Hazardous polymerization	Hazardous polymerization does not occur.
Hazardous reactions	None under normal processing.

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### 10.4. Conditions to avoid

Protect from light. Extremes of temperature and direct sunlight.

### 10.5. Incompatible materials

Strong oxidizing agents. Metals.

### 10.6. Hazardous decomposition products

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

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

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.

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

### Information on likely routes of exposure

<b>Inhalation</b>	Avoid breathing vapors or mists.
<b>Eye contact</b>	Avoid contact with eyes.
<b>Skin contact</b>	Avoid contact with skin.
<b>Ingestion</b>	Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

<b>Symptoms</b>	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.
<b>Skin corrosion/irritation</b>	No information available.
<b>Serious eye damage/eye irritation</b>	No information available.
<b>Sensitization</b>	No information available.
<b>Mutagenic effects</b>	No information available.
<b>Carcinogenic effects</b>	No information available.
<b>Reproductive toxicity</b>	No information available.
<b>STOT - single exposure</b>	No information available.
<b>STOT - repeated exposure</b>	No information available.
<b>Aspiration Hazard</b>	No information available.
<b>Other information</b>	No information available.

## SECTION 12: Ecological information

### 12.1. Toxicity

No information available.

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

**Unknown Aquatic Toxicity** 0% of the mixture consists of components of unknown hazards to the aquatic environment.

### 12.2. Persistence and degradability

No information available.

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### 12.3. Bioaccumulative potential

**Bioaccumulation** No information available.  
**Bioconcentration factor (BCF)** No information available.

Chemical name	Octanol-Water Partition Coefficient
glycerol	-1.76

### 12.4. Mobility in soil

No information available.

### 12.5. Results of PBT and vPvB assessment

No information available.

### 12.6. Other adverse effects

No information available

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

**Waste from residues / unused products** Dispose of in accordance with local regulations.  
**Contaminated packaging** Empty containers should be taken to an approved waste handling site for recycling or disposal.  
**Other information** Waste codes should be assigned by the user based on the application for which the product was used.

## SECTION 14: Transport information

### IMDG/IMO

14.1 UN number Not regulated  
14.2 UN proper shipping name Not regulated  
14.3 Transport hazard class(es) Not regulated  
14.4 Packing group Not regulated  
14.5 Environmental hazards None  
14.6 Special precautions for user None  
14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not regulated

14.1 UN number Not regulated  
14.2 UN proper shipping name Not regulated  
14.3 Transport hazard class(es) Not regulated  
14.4 Packing group Not regulated  
14.5 Environmental hazards None  
14.6 Special precautions for user None

### IATA

14.1 UN number Not regulated  
14.2 UN proper shipping name Not regulated  
14.3 Transport hazard class(es) Not regulated  
14.4 Packing group Not regulated  
14.5 Environmental hazards None  
14.6 Special precautions for user None

## SECTION 15: Regulatory information

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

**Candidate List of Substances of Very High Concern for Authorization Information**

This product does not contain Substances of Very High Concern (SVHC).

**SEVESO Directive Information**

This product does not contain substances identified in the SEVESO Directive.

**International inventories**

<b>TSCA 8(b)</b>	Complies
<b>DSL/NDSL</b>	Complies
<b>EINECS/ELINCS</b>	Complies
<b>ENCS</b>	-
<b>IECSC</b>	Complies
<b>KECL</b>	Complies
<b>PICCS</b>	Complies
<b>AICS</b>	Complies

**International inventories legend**

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory  
**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List  
**EINECS/ELINCS** - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances  
**ENCS** - Japan Existing and New Chemical Substances  
**IECSC** - China Inventory of Existing Chemical Substances  
**KECL** - Korean Existing and Evaluated Chemical Substances  
**PICCS** - Philippines Inventory of Chemicals and Chemical Substances  
**AICS** - Australian Inventory of Chemical Substances

**15.2. Chemical safety assessment**

For this substance a chemical safety assessment has not been carried out

**SECTION 16: Other information**

**Full text of H-Statements referred to under Sections 2 and 3**

This substance/mixture does not meet the criteria for classification in accordance with Regulation (EC) No. 1272/2008

**Classification procedure:** Expert judgment and weight of evidence determination.  
**Issuing Date:** 2018-11-06

**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.**