

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

**Issuing Date:** 2018-12-13

Version: 1

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

1.1. Product identifier

Product No Product name	4445 Autophagy Antibody Sampler Kit
Kit Component	3495: Beclin-1 (D40C5) Rabbit mAb 12741: LC3A/B (D3U4C) XP® Rabbit mAb 12994: Atg5 (D5F5U) Rabbit mAb 4180: Atg12 (D88H11) Rabbit mAb 8089: Atg16L1 (D6D5) Rabbit mAb 8558: Atg7 (D12B11) Rabbit mAb 3415: Atg3 Antibody 7074: Anti-rabbit IgG, HRP-linked Antibody
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 (>100%)	Not Listed	56-81-5
sodium azide (0 - 10%)	011-004-00-7	26628-22-8

#### 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.	Cell Signaling Technology, Inc.
Dellaertweg 9b	3 Trask Lane
2316 WZ Leiden	Danvers, MA 01923
The Netherlands	United States
TEL: +31 (0)71 7200 200	TEL: +1 978 867 2300
FAX: +31 (0)71 891 0019	FAX: +1 978 867 2400

# Website www.cellsignal.com E-mail Address 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)

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Europe

# **SECTION 2: Hazards identification**

#### 2.1. Classification of the substance or mixture

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

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

#### 2.2. Label elements

#### 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**

#### **Kit Component**

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

3495: Beclin-1 (D40C5) Rabbit mAb 12741: LC3A/B (D3U4C) XP® Rabbit mAb 12994: Atg5 (D5F5U) Rabbit mAb 4180: Atg12 (D88H11) Rabbit mAb 8089: Atg16L1 (D6D5) Rabbit mAb 8558: Atg7 (D12B11) Rabbit mAb

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
sodium azide	26628-22-8	<0.02	247-852-1	Acute Tox. 2 (H300) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410) (EUH032)	no data available

#### **Kit Component**

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

3415: Atg3 Antibody 7074: Anti-rabbit IgG, HRP-linked Antibody

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

General advice	Use first aid treatment according to the nature of the injury. When symptoms persist or in all cases of doubt seek medical advice.
Inhalation	IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.

Skin contact	Get medical attention immediately if symptoms occur. Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes.
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.
Ingestion	Clean mouth with water and afterwards drink plenty of water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person.

#### 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.
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#### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

Suitable Extinguishing MediaUse extinguishing measures that are appropriate to local circumstances and the<br/>surrounding environment.Unsuitable Extinguishing MediaNone.

#### 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

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 personnelAvoid contact with skin, eyes and clothing. Use personal protective equipment. For personal<br/>protection see section 8.For emergency respondersUse 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. See section 8. 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>	Ceiling / Peak: 400
		TWA 10 mg/m <sup>3</sup>			mg/m <sup>3</sup>
					TWA: 200 mg/m <sup>3</sup>
sodium azide	TWA 0.1 mg/m <sup>3</sup>	STEL 0.3 mg/m <sup>3</sup>	TWA 0.1 mg/m <sup>3</sup>	TWA 0.1 mg/m <sup>3</sup>	TWA: 0.2 mg/m <sup>3</sup>
	STEL 0.3 mg/m <sup>3</sup>	TWA 0.1 mg/m <sup>3</sup>	STEL 0.3 mg/m <sup>3</sup>	STEL 0.3 mg/m <sup>3</sup>	Ceiling / Peak: 0.4
	S*	Skin	P*	S*	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>	
sodium azide	TWA 0.1 mg/m <sup>3</sup>	TWA 0.1 mg/m <sup>3</sup>	Huid*	TWA 0.1 mg/m <sup>3</sup>	TWA 0.1 mg/m <sup>3</sup>
	STEL 0.3 mg/m <sup>3</sup>	STEL 0.3 mg/m <sup>3</sup>	STEL 0.3 mg/m <sup>3</sup>	STEL 0.3 mg/m <sup>3</sup>	H*
	Pelle*	Ceiling 0.29 mg/m <sup>3</sup>	TWA 0.1 mg/m <sup>3</sup>	iho*	
		Ceiling 0.11 ppm	_		
		C(A4)			
		P* ´			
Chemical name	Austria	Switzerland	Poland	Norway	Ireland
glycerol		SS-C**	TWA 10 mg/m <sup>3</sup>		TWA 10 mg/m <sup>3</sup>
		TWA 50 mg/m <sup>3</sup>	0		STEL 30 mg/m <sup>3</sup>
		STEL 100 mg/m <sup>3</sup>			
sodium azide	H*	TWA 0.2 mg/m <sup>3</sup>	TWA 0.1 mg/m <sup>3</sup>	TWA 0.1 mg/m <sup>3</sup>	TWA 0.1 mg/m <sup>3</sup>
	STEL 0.3 mg/m <sup>3</sup>	STEL 0.4 mg/m <sup>3</sup>	STEL 0.3 mg/m <sup>3</sup>	STEL 0.1 mg/m <sup>3</sup>	STEL 0.3 mg/m <sup>3</sup>
	TWA 0.1 mg/m <sup>3</sup>				Skin

#### 8.2. Exposure controls

#### Appropriate engineering controls

Showers, eyewash stations, and ventilation systems.

# Individual protection measures, such as personal protective equipmentEye/face protectionSafety glasses with side-shieldsSkin protectionImpervious gloves.Hand protectionWear suitable protective clothing.OtherIn case of inadequate ventilation wear respiratory protection.

#### **Environmental Exposure Controls**

No information available.

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

#### 9.1. Information on basic 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.

Kit Component	3495: Beclin-1 (D40C5) Rabbit mAb
Physical state	Liquid
Appearance	Clear
Color	Colorless

pH VALUE 7.5 @ 20 °C Remarks **Kit Component** 12741: LC3A/B (D3U4C) XP® Rabbit mAb Physical state Liquid Appearance Clear Color Colorless pH VALUE 7.5 @ 20 °C Remarks **Kit Component** 12994: Atg5 (D5F5U) Rabbit mAb Physical state Liquid Appearance Clear Colorless Color pH VALUE 7.5 Remarks @ 20 °C **Kit Component** 4180: Atg12 (D88H11) Rabbit mAb Physical state Liquid Appearance Clear Color Colorless pH VALUE 7.5 Remarks @ 20 °C 8089: Atg16L1 (D6D5) Rabbit mAb **Kit Component** Physical state Liquid Appearance Clear Color Colorless pH VALUE 7.5 @ 20 °C Remarks **Kit Component** 8558: Atg7 (D12B11) Rabbit mAb Physical state Liquid Appearance Clear Color Colorless pH VALUE 7.5 Remarks @ 20 °C **Kit Component** 3415: Atg3 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 @ 20 °C Remarks

# **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.

#### 10.4. 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.

#### 10.5. Incompatible materials

Strong oxidizing agents. Strong acids.

#### 10.6. Hazardous decomposition products

Nitrogen oxides (NOx).

# **SECTION 11: Toxicological information**

#### 11.1. Information on toxicological effects

#### **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.

#### **Component Information**

Chemical name	LD50 Oral	LD50 Dermal	LC50 Inhalation
glycerol	= 12600 mg/kg (Rat)	> 10 g/kg (Rabbit)	> 570 mg/m³(Rat)1 h
sodium azide	= 27 mg/kg (Rat)	= $20 \text{ mg/kg}$ (Rabbit) = $50 \text{ mg/kg}$ (	-
		Rat )	

#### Information on likely routes of exposure

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	
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	
Carcinogenic effects	No information available	
Reproductive toxicity	No information available.	

Systemic Target Organ Toxicity	No information available
(STOT)	

**Aspiration Hazard** 

No information available.

## **SECTION 12: Ecological information**

## 12.1. Toxicity

Product Information No information available

#### **Component Information**

Chemical name	Toxicity to algae	Toxicity to fish	Toxicity to daphnia and other aquatic invertebrates
glycerol	-	LC50 51 - 57 mL/L (Oncorhynchus	EC50 500 mg/L (Daphnia magna)
		mykiss) 96 h	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	LC100 1 mg/L (Orconectes rusticus) 96 h
		h	

#### 12.2. Persistence and degradability

No information available.

#### 12.3. Bioaccumulative potential

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

#### 4445 Autophagy Antibody Sampler Kit

<ul> <li>14.1 UN number</li> <li>14.2 UN proper shipping name</li> <li>14.3 Transport hazard class(es)</li> <li>14.4 Packing group</li> <li>14.5 Environmental hazards</li> <li>14.6 Special precautions for user</li> <li>14.7 Transport in bulk according to</li> <li>Annex II of MARPOL 73/78 and the</li> <li>IBC Code</li> </ul>	Not regulated Not regulated Not regulated Not regulated None None Not regulated
<ul> <li>14.1 UN number</li> <li>14.2 UN proper shipping name</li> <li>14.3 Transport hazard class(es)</li> <li>14.4 Packing group</li> <li>14.5 Environmental hazards</li> <li>14.6 Special precautions for user</li> </ul>	Not regulated Not regulated Not regulated Not regulated None None
IATA 14.1 UN number 14.2 UN proper shipping name 14.3 Transport hazard class(es) 14.4 Packing group 14.5 Environmental hazards 14.6 Special precautions for user	Not regulated Not regulated Not regulated Not regulated None 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	
TSCA 8(b)	-
DSL/NDSL	Complies
EINECS/ELINCS	-
ENCS	-
IECSC	Complies
KECL	-
PICCS	-
AICS	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

H300 - Fatal if swallowed H400 - Very toxic to aquatic life H410 - Very toxic to aquatic life with long lasting effects EUH032 - Contact with acids liberates very toxic gas

Classification procedure:	Expert judgment and weight of evidence determination.
Issuing Date:	2018-12-13
Disclaimer	

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