

IncuCyte[®] Caspase-3/7 Red Reagent

1 IDENTIFICATION Includes product identifier; manufacturer or distributor name, address, phone number; emergency phone number; recommended use; restrictions on use.

Product code: Cat. No. 4704
 Product name: IncuCyte[®] Caspase-3/7 Red Reagent
 Unit size: 20 µL, 0.5 mM
 Manufacturer/supplier: Essen BioScience Inc. Emergency contact: +1 (734) 769-1600
 300 West Morgan Road Fax contact: +1 (734) 769-7295
 Ann Arbor
 MI 48108
 USA

For research use only. Not intended for human or animal diagnostic or therapeutic uses.

2 HAZARD(S) IDENTIFICATION Includes all hazards regarding the chemical; required label elements.

Classification according to Regulation (EC) No 1272/2008[CLP]

Skin Irritation	Eye Irritation	STOT SE	Acute Toxicity
2	2	3	4

Classification according to Directive 1999/45/EC

R-phrases

R36/37/38: Irritating to eyes, respiratory system and skin.

S-phrases

S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S37/39: Wear suitable gloves and eye/face protection.

Labelling according to Regulation (EC) No 1272/2008[CLP]



Signal word: WARNING, DANGER

Hazard Statements

- H315: Causes skin irritation.
- H319: Causes serious eye irritation.
- H335: May cause respiratory irritation.
- H302: Harmful if swallowed.

HMIS Classification

Health hazard: 0
 Flammability: 2
 Physical hazards: 0

NFPA Rating

Health hazard: 0
 Fire: 2
 Reactivity Hazard: 0

Precautionary Statements

- P264: Wash hands thoroughly after handling.
- P280: Wear protective gloves/protective clothing/eye protection/face protection.
- P302+P352: IF ON SKIN: wash with plenty of soap and water.
- P332+P313: IF SKIN IRRITATION OCCURS: Get medical advice/attention.
- P362: Take off contaminated clothing and wash before reuse.
- P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P337+P313: IF EYE IRRITATION PERSISTS: Get medical advice/attention.
- P261: Avoid breathing dust/fume/gas/mist/vapors/spray.
- P271: Use only outdoors or in a well-ventilated area.
- P304+P340: IF INHALED: Remove victim to fresh air and Keep at rest in a position comfortable for breathing.
- P312: Call a POISON CENTER or doctor/physician if you feel unwell.
- P403+P233: Store in a well-ventilated place. Keep container tightly closed.
- P405: Store locked up.
- P501: Dispose of contents/container to hazardous waste.
- P270: Do not eat, drink or smoke when using this product.
- P301+P312: IF SWALLOWED: call a POISON CENTER or doctor/physician IF you feel unwell.
- P330: Rinse mouth.
- P501: Dispose of contents/container to hazardous waste.
- P312: Call a POISON CENTER or doctor/physician if you feel unwell.

3 COMPOSITION/INFORMATION ON INGREDIENTS Includes information on chemical ingredients; trade secret claims.

Chemical name	CAS No.	EC No.	Index No.	Weight %	Classification according to 67/548/EEC	Classification according to regulation (EC)No1278/2008
IncuCyte® Caspase-3/7 Red Reagent	-	-	-	<0.05%	-	-
Dimethylsulfoxide	67-68-5	200-664-3		>99%	R36/37/38	H315: Causes skin irritation. H319: Causes serious eye irritation. H335: May cause respiratory irritation. H302 Harmful if swallowed.

4 FIRST-AID MEASURES Includes important symptoms/ effects, acute, delayed; required treatment.

- General advice: Remove affected clothing and launder before reuse.
- If inhaled: If breathed in, move person into fresh air. If not breathing, give artificial respiration and seek medical care.
- In case of skin contact: Wash off with soap and plenty of water. If irritation persists, seek medical care.
- In case of eye contact: Flush eyes with water for 15 minutes. If irritation persists, seek medical care.
- If swallowed: Do NOT induce vomiting. Rinse mouth with water. Seek medical care.

5 FIRE-FIGHTING MEASURES Lists suitable extinguishing techniques, equipment; chemical hazards from fire.

- Suitable extinguishing media: Carbon dioxide, dry chemical extinguishers, foam extinguishers or water.
- Special protective equipment for firefighters: Burning produces poisonous gases, sulfur oxides. Wear self contained breathing apparatus for firefighting if necessary.

6 ACCIDENTAL RELEASE MEASURES Lists emergency procedures; protective equipment; proper methods of containment and cleanup.

Personal precautions: Avoid breathing vapors, mist or gas. Remove all sources of ignition.
 Environmental precautions: Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
 Methods and materials for containment and cleaning up: Contain spillage. Soak up spilled substance with inert absorbent material. Keep in suitable, closed containers for disposal.

7 HANDLING AND STORAGE Lists precautions for safe handling and storage, including incompatibilities.

Precautions for safe handling: Avoid inhalation of vapor or mist. Avoid direct contact with substance.
 Conditions for safe storage: Keep container tightly closed in a dry and well-ventilated place. Store at 4 °C.

8 EXPOSURE CONTROLS/ PERSONAL PROTECTION Lists OSHA's Permissible Exposure Limits (PELs); ACGIH Threshold Limit Values (TLVs); and any other exposure limit used or recommended by the chemical manufacturer, importer, or employer preparing the SDS where available as well as appropriate engineering controls; personal protective equipment (PPE).

Components with workplace control parameters

Substance: Dimethylsulfoxide
 CAS no.: 67-68-5

	Country	Australia	Austria	Belgium	Canada	Denmark	European Union	France
Limit value, 8 hours		-	160 mg/m3	-	-	160 mg/m3	-	-
Limit value, short term		-	-	-	-	320 mg/m3	-	-
	Country	Germany	Hungary	Italy	Japan	Netherlands	Poland	South Korea
Limit value, 8 hours		160 mg/m3	-	-	-	-	-	-
Limit value, short term		320 mg/m3	-	-	-	-	-	-
	Country	Spain	Sweden	Switzerland	United Kingdom	USA-NIOSH	USA-OSHA	
Limit value, 8 hours		-	150 mg/m3	160 mg/m3	-	-	-	
Limit value, short term		-	500 mg/m3	320 mg/m3	-	-	-	

Personal protective equipment

Hand protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.
 Respiratory protection: Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).
 Eye protection: Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).
 Hygiene measures: Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

9 PHYSICAL AND CHEMICAL PROPERTIES

Lists the chemical's characteristics.

General information

Chemical Name:	IncuCyte [®] Caspase-3/7 Red Reagent
Appearance:	Liquid.
Odor:	No data available.
Odor threshold:	No data available.
pH:	No data available.
Melting point/freezing point:	No data available.
Boiling point:	No data available.
Flash point:	No data available.
Evaporate rate:	No data available.
Flammability:	No data available.
Explosive limits:	Soluble in water.
Vapor pressure:	No data available.
Vapor density:	No data available.
Relative density:	No data available.
Solubility:	No data available.
Partition coefficient:n-octanol/water:	No data available.
Auto-ignition temperature:	No data available.
Decomposition temperature:	No data available.
Viscosity:	No data available.
Explosive properties:	No data available.
Oxidising properties:	No data available.

10 STABILITY AND REACTIVITY

Lists chemical stability and possibility of hazardous reactions.

Chemical stability:	Stable under normal conditions.
Possibility of hazardous reactions:	No data available.
Conditions to avoid:	Heat, flames and sparks.
Materials to avoid:	No data available.
Hazardous decomposition products:	Hazardous decomposition products formed under fire conditions. - Carbon oxides, sulfur oxides.
Other decomposition products:	No data available.

11 TOXICOLOGICAL INFORMATION Includes routes of exposure; related symptoms, acute and chronic effects; numerical measures of toxicity

Acute toxicity

Chemical name	LD50 (oral, rat/mouse)	LD50 (dermal, rabbit)	LC50 (inhalation, rat/mouse)
Dimethylsulfoxide	14,500 mg/kg	> 5,000 mg/kg	4 h - 40250 ppm

CGIH: Other information on acute toxicity: No data available.
 Skin corrosion/irritation: No data available.
 Serious eye damage/eye irritation: No data available.
 Respiratory or skin sensitization: No data available.
 Germ cell mutagenicity: Salmonella typhimurium assay (Ames test): negative (+/- activation), DMSO is used as a neutral solvent in the Ames mutagen test.

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
 ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
 NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
 OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
 Reproductive toxicity: Experiments have shown reproductive toxicity effects on laboratory animals (Dimethyl sulfoxide)

Specific target organ toxicity - single exposure (Globally Harmonized System)

Dimethyl sulfoxide: STOT SE category 3 (respiratory system).

Specific target organ toxicity - repeated exposure (Globally Harmonized System)

No data available.
 Aspiration hazard: May cause respiratory irritation.

Potential health effects

Inhalation: May be harmful if inhaled. May cause respiratory tract irritation.
 Ingestion: May be harmful if swallowed.
 Skin: May be harmful if absorbed through skin. May cause skin irritation.
 Eyes: May cause eye irritation.

Additional Information

RTECS: PV6210000 (DMSO)

12 ECOLOGICAL INFORMATION List chemical's impact on the environment.

Toxicity DMSO: The LC50(96hrs) for ten species of fish range from 32500 to 43000ppm.
 Persistence and degradability: No information available.
 Biodegradation: Dimethyl sulfoxide: biodegradation: 90% (28d).
 Mobility in soil: No information available.
 Results of PBT and vPvB assessment: No information available.
 Other adverse effects: No information available.
 Additional information: No information available.

13 DISPOSAL CONSIDERATIONS Do not dispose product directly into sewage. Consult local state or national regulation for proper disposal.

14 TRANSPORT INFORMATION IATA.

IATA, IMDG, DOT(US): Not dangerous good during transportation.
UN number: None.
UN proper shipping name: None.
Transport hazard class: None.
Packing group: None.
Environmental hazards: None.
Special precaution for user: None.

15 REGULATORY INFORMATION Lists federal and state regulations.

US Federal Regulations

US Toxic Substances Control Act(TSCA): Not listed.
SARA 302: No chemicals were found.
SARA 313: No chemicals were found.
SARA 311/312 hazards: DMSO : fire hazard, chronic health hazard.
Acute health hazard: Yes.
Chronic health hazard: No.
Fire hazard: Yes.
Sudden release of pressure hazard: No.
Reactive hazard: No.

16 OTHER INFORMATION Includes the date of preparation or last revision.

Classification according to Regulation (EC) Nr. 1272/2008

Prepared by: Essen BioSciences
Version number: 8000-392-B00
Reason for revision: Update reagent name.

For research use only. Not intended for human or animal diagnostic or therapeutic uses.

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