

SAFETY DATA SHEET

Cat# K295-10, Cell Surface Protein Isolation Kit

SDS DATE: 23APR2015

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Cell Surface Protein Isolation Kit
PRODUCT CODES: Cat# K295-10
MANUFACTURER: BioVision, Inc.
DIVISION:
ADDRESS: 155 S. Milpitas Blvd. Milpitas, CA 95035
EMERGENCY PHONE: 858-373-8066
CHEMTREC PHONE:
OTHER CALLS: 408-493-1800
FAX PHONE: 408-493-1801

SECTION 2: HAZARDS IDENTIFICATION

Component	Description	Amount	Safety Information
Quenching solution	Proprietary Buffer	10 ml	No hazards
Lysis Buffer	Proprietary Buffer (contains NP-40)	6.5 ml	See below
Wash Buffer	Proprietary Buffer (contains NP-40)	12 ml	See below
Streptavidin Beads	slurry	1.5 ml	No hazards
PBS tablet	tablet	3	No hazards
TBS tablet	tablet	1	No hazards
Sulfo-NHS-SS-biotin	powder	5 vials	No hazards
DTT	liquid	100 ul	See below

NP-40:

Emergency Overview

OSHA Hazards: Irritant, Harmful by ingestion

GHS Classification: Acute toxicity, Oral (Category 4)
Serious eye damage (Category 3)
Skin irritation (Category 5)
Specific target organ toxicity – single exposure (Category 3)
Acute aquatic toxicity (Category 3)

GHS Label elements, including precautionary statements

Pictogram:



Signal word:

warning

Hazard statement(s):

H303: May be harmful if swallowed
H319: Causes serious eye irritation

Precautionary statement(s):

P261 Avoid breathing dust/fumes/gas/mist/vapors/spray.
P264 Wash hands thoroughly after handling.
P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

HMIS Classification

Health hazard: 2

Flammability: 1

Physical hazards: 0

NFPA Rating

Health Hazard: 2

Fire: 1

Reactivity Hazard: 0

Potential Health Effects

Skin: Causes skin irritation.

Eyes: Causes eye irritation.

Ingestion: May be harmful if swallowed.

DTT:

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Emergency Overview

OSHA Hazards: Target organ effect, Harmful by ingestion, Irritant

Target Organs: Central nervous system

GHS Classification: Acute toxicity, Oral (Category 4)
Skin irritation (Category 2)
Eye irritation (Category 2A)

GHS Label elements, including precautionary statements

Pictogram:



Signal word:

Warning

Hazard statement(s):

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

Precautionary statement(s): P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

HMIS Classification

Health hazard: 2

Chronic Health Hazard: *

Flammability: 0

Physical hazards: 0

NFPA Rating

Health hazard: 2

Fire: 0

Reactivity Hazard: 0

Potential Health Effects

Inhalation: May be harmful if inhaled. Causes respiratory tract irritation.

Skin: May be harmful if absorbed through skin. Causes skin irritation.

Eyes: Causes eye irritation.

Ingestion: Harmful if swallowed.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS Number	EC-No.	Molecular Weight	Chemical Formula
NP-40	9016-45-9	500-024-6	680.0	-
DTT	3483-12-3	222-468-7	154.25	C4H10O2S2

SECTION 4: FIRST AID MEASURES

General advice: Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

If inhaled: If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact: Wash off with soap and plenty of water. Consult a physician.

In case of eye contact: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed: DO NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

SECTION 5: FIRE-FIGHTING MEASURES

Suitable extinguishing media: For small (incipient) fires, use media such as "alcohol" foam, dry chemical, or carbon dioxide. For large fires, apply water from as far as possible. Use very large quantities (flooding) of water applied as a mist or spray; solid streams of water may be ineffective. Cool all affected containers with flooding quantities of water.

Special protective equipment for firefighters: Wear self-contained breathing apparatus for firefighting if necessary.

Hazardous combustion products: Hazardous combustion products formed under fire conditions – no data available.

Further information: Use water spray to cool unopened containers.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions: Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist, or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

Environmental precautions: Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

Methods for cleaning up: Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

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SECTION 7: HANDLING AND STORAGE

Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapor or mist. Use explosion-proof equipment. Keep away from sources of ignition (no smoking). Take measures to prevent the buildup of electrostatic charge.

Conditions for safe storage

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

Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Recommended storage temperature: 4°C

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

NP-40:

Contains no substances with occupational exposure limit values.

Personal protective equipment

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

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.

Eye protection

Face shield and safety glasses. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin and body protection

Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Property	DTT	NP-40
Appearance:	Clear liquid	Liquid
pH:	3.0-5.0	6 at 10 g/l
Water Solubility:	Highly soluble	No data available
Other Solubility:	No data available	No data available
Boiling Point (°C):	No data available	No data available
Melting Point (°C):	No data available	57-58 °C (135-136 °F)
Flash Point (°C):	No data available	113 °C (235 °F) – closed cup
Ignition Temperature (°C):	No data available	No data available
Density:	1.035 g/cm ³	1.06 g/ml at 20 °C (68 °F)

SECTION 10: STABILITY AND REACTIVITY

Property	DTT	NP-40
Chemical stability:	Stable under recommended storage conditions	Stable under recommended storage conditions
Conditions to avoid:	No data available	No data available
Materials to avoid:	Bases, oxidizing agents, reducing agents, alkali metals	Strong oxidizing agents
Hazardous decomposition products:	Carbon oxides, sulfur oxides, hydrogen sulfide gas	No data available

SECTION 11: TOXICOLOGICAL INFORMATION

NP-40:

Acute toxicity: no data available

Skin corrosion/irritation: Skin – rabbit – mild skin irritation.

Serious eye damage/eye irritation: Eyes – rabbit – severe eye irritation.

Respiratory or skin sensitization: Prolonged or repeated exposure may cause allergic reactions in certain sensitive individuals.

Germ cell mutagenicity: no data available

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.

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- 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: no data available

Teratogenicity: no data available

Specific target organ toxicity – single exposure (GHS): Inhalation – may cause respiratory irritation.

Specific target organ toxicity – repeated exposure (GHS): no data available

Aspiration hazard: no data available

Potential Health Effects

Inhalation: May be harmful if inhaled. Causes respiratory tract irritation.

Skin: Harmful if absorbed through skin. Causes skin irritation.

Eyes: Causes eye irritation.

Ingestion: Harmful if swallowed.

Signs and Symptoms of Exposure: Exposure may cause nausea, headache, and/or vomiting. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Synergistic effects: no data available

Additional information: RTECS: AX0247000

SECTION 12: ECOLOGICAL INFORMATION

NP-40:

Persistence and degradability: Biodegradability→ Result: 86% - readily biodegradable; Method: modified Sturm test

Toxicity: Toxicity to fish→ mortality LOEC – Pimephales promelas (fathead minnow) – 2.0 mg/l – 144 h

Mortality LOEC – Pimephales promelas (fathead minnow) – 1.8 mg/l – 144 h

LC50 – Lepomis macrochirus (Bluegill) – 1.0-9.7 mg/l – 96 h

Toxicity to daphnia and other aquatic invertebrates→ mortality LOEC 0 Daphnia magna (water flea) – 10.0 mg/l – 144 h

EC50- Daphnia magna (water flea) – 20.0 mg/l – 144 h

Toxicity to algae→ Growth inhibition LOEC – Pseudokirchneriella subcapitata – 16.0 mg/l – 96 h

Growth inhibition LOEC – Pseudokirchneriella subcapitata – 8.0 mg/l – 96 h

Bioaccumulative potential: Does not bioaccumulate

Mobility in soil: no data available

PBT and vPvB assessment: no data available

Other adverse effects: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Very toxic to aquatic life.

DTT:

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: no data available

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: no data available

Teratogenicity: no data available

Potential Health Effects

Inhalation: May be harmful if inhaled. Causes respiratory tract irritation.

Skin: May be harmful if absorbed through skin. Causes skin irritation.

Eyes: Causes eye irritation.

Ingestion: Harmful if swallowed.

Signs and Symptoms of Exposure: Exposure may cause central nervous system depression. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Synergistic effects: no data available

Additional information: RTECS: not available

SECTION 13: DISPOSAL CONSIDERATIONS

Product: Observe all federal, state, and local environmental regulations.

Contaminated packaging: Dispose of as unused product.

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SECTION 14: TRANSPORT INFORMATION

NP-40:

DOT (US): Not dangerous goods.

IMDG: UN- number: 3082, Class: 9; Packing group: III; EMS-No. F-A, S-F; Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (4-Nonylphenyl-polyethylene glycol); Marine pollutant: Yes

IATA: UN-number: 3082, Class: 9; Packing group: III; Proper shipping name: Environmentally hazardous substance, liquid, n.o.s. (4-Nonylphenyl-polyethylene glycol)

Further information: EHS-Mark required (ADR 2.2.9.1.10, IMDG code 2.10.3) for single packaging and combination packaging containing inner packaging with Dangerous Goods > 5L for liquids or >5 kg for solids.

DTT:

DOT (US): Not dangerous goods.

IMDG: Not dangerous goods.

IATA: Not dangerous goods.

SECTION 15: REGULATORY INFORMATION

OSHA Hazards: NP-40: Irritant, Harmful by ingestion; DTT: Target organ effect, Harmful by ingestion, Irritant

SARA 302 Components: SARA 302: No chemical in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components: SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title II, Section 313.

SARA 311/312 Hazards: NP-40: Acute Health Hazard; DTT: Acute Health Hazard, Chronic Health Hazard

Massachusetts Right To Know Components: No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know Components: NP-40, CAS-No. 9016-45-9; DTT, CAS-No. 3483-12-3

New Jersey Right To Know Components: NP-40, CAS-No. 9016-45-9; DTT, CAS-No. 3483-12-3

California Prop. 65 Components: This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

EU regulations

Component	Risk Phrases	Safety Phrases
NP-40	R22, R37/38, R41, R50	S23, S29, S36/37/39, S45, S56, S61
DTT	R22, R36/37/38	S26, S36

SECTION 16: OTHER INFORMATION:

OTHER INFORMATION:

PREPARATION INFORMATION:

DISCLAIMER:

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. BioVision, Inc., shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale.