# RayBiotech The protein array pioneer

# **SAFETY DATA SHEET**

Version 2.2 Revision Date 11/17/2015

# 1. IDENTIFICATION

**Product Identification** 

Product Name Phospho-ERK/JNK/P38? ELISA

Catalog Number PEL-MAPK-SK

Usage

This product is furnished for LABORATORY RESEARCH USE ONLY. Not for diagnostic or therapeutic use.

**Supplier Identification** 

Company RayBiotech, Inc.

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Norcross, GA 30092

USA

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Fax 770-206-2393

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Email <a href="info@raybiotech.com">info@raybiotech.com</a>

**Emergency Telephone Number** 

Emergency Phone # 1-888-494-8555

# 2. HAZARDS IDENTIFICATION

# **Hazardous Ingredients**

- 1. The 2X Cell Lysis Buffer contains Triton-X-100.
- 2. The Stop Solution contains Sulfuric Acid.

# **OSHA/HCS** status

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

# Classification of the substance or mixture

Triton-X-100 (lysis buffer): ACUTE TOXICITY Sulphuric Acid (stop solution): ACUTE TOXICITY

**GHS Label Elements** 

**Hazard Pictograms** 

**Hazard Statements** 

❖

Warning

Signal Word

Triton-X-100 (lysis buffer): Harmful if swallowed; Risk of serious damage

to eyes; Irritating to skin.

Sulphuric Acid (stop solution): Harmful if inhaled.

IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you

feel unwell.

Response EYE CONTACT: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

SKIN CONTACT: Wash with clean water or soap and water.

INHALATION: Move to an outside area and breath fresh air. Clear the

nose by blowing.

Storage Not applicable.

Disposal Not applicable.

# Hazards not otherwise classified

None known.

# 3 COMPOSITION/INFORMATION ON INGREDIENTS

# **CAS Numbers/other identifiers**

Ingredient Name	<u>%</u>	CAS Number
Triton-X-100	1-3	9002-93-1
Sulfuric Acid	1-3	7664-93-9

Any percentage shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

# 4. FIRST-AID MEASURES

# **Description of Necessary First Aid Measures**

Eye Contact	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention if irritation occurs.			
Skin Contact	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes.  Get medical attention if symptoms occur. Wash clothing and clean shoes before reuse.			
Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.			
Ingestion	Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.			

Risk of serious damage to eyes. Eye Contact

Skin Contact Irritating to skin.

Inhalation No known significant effects or critical hazards.

Ingestion Harmful if swallowed.

# **Over-Exposure Signs/Symptoms**

No specific data.

# **Notes to Physician**

Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

# **Specific Treatments**

No specific treatment

# **Protection of First-Aiders**

No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

### 5. FIRE FIGHTING MEASURES

Use an extiguishing agent suitable for the surrounding fire, such as Extinguishing Media

water spray, carbon dioxide, dry chemical power or appropriate foam.

Prevent contact with skin and eyes.

In a fire or if heated, a pressure increase will occur and the component Chemical Hazards from Fire

containers may burst.

### 6. **ACCIDENTAL RELEASE MEASURES**

# Personal Precautions, Protective Equipment and Emergency Procedures

For Non- Emergency Personnel	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.		
For Emergency Responders	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For Non-Emergency Personnel" above.		
Environmental Precautions	Il and sewers. Inform the relevant authorities it the product has caused environmental		
Protective Equipment	II Wear respirator, chemical safety doddles, rubber boots and rubber dloves		

Methods and Materials for Containment and Cleaning Up

Small Spill	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
Large Spill	Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

# 7. STORAGE AND HANDLING

# **Storage**

Store the entire kit frozen at -20°C upon arrival.

# Handling

Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Avoid contact with eyes, skin, and clothing. Avoid ingestion and inhalation.

# 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

# **Permissible Exposure Limits (PELs)**

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

# **Appropriate Engineering Controls**

**Showers** 

Eyewash stations

Ventilation systems

# **Protective Equipment**

Wear suitable protective clothing, including gloves, safety glasses, dust mask, and a laboratory coat.

# **Special Precautions**

Not for human or drug use. Not for household use.

# 9. PHYSICAL AND CHEMICAL PROPERTIES

Refer to component SDS

# 10. STABILITY AND REACTIVITY

Chemical Stability Stable under normal handling procedures.

Hazardous Reactions Under normal conditions of storage and use, hazardous reactions will

not occur.

# 11. TOXICOLOGICAL INFORMATION

# Acute toxicity

Ingredient Name	Result	Species	Dose
Triton-X-100	LD50		707 mg/kg 2140 mg/kg
Sulfuric Acid	LD50		347 ppm 2140 mg/kg

Carcinogenicity Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65;

Sensitization Not Available Mutagenicity Not available **Reproductive Toxicity** Not Available Specific target organ toxicity Not available

(single exposure)

Specific target organ toxicity

Not available

(repeated exposure)

Not available

Aspiration hazard Routes of entry anticipated: Oral, Dermal, Inhalation.

Likely routes of exposure

Potential acute health effects

Eye contact

Inhalation

Ingestion

**Skin Contact** Triton-X-100 (lysis buffer): Skin irritant.

12. ECOLOGICAL INFORMATION

No data available **Ecotoxicity** Persistence and degradability No data available Bioaccumulation/accumulation No data available **Mobility in environmental** 

media

No data available

Other hazardous effects May be harmful to the environment, particularly aquatic organisms.

13. DISPOSAL CONSIDERATIONS

Disposal should be in accordance with applicable national, state, and local laws and regulations. Local regulations may be more stringent than national or state requirements. Verify local and state regulations before discharging into public sewers or landfills. Do not dump into any body of water. Contact a licensed professional waste disposal service for

Triton-X-100 (lysis buffer): Risk of serious damage to eyes.

Sulphuric Acid (stop solution): Harmful if inhaled.

appropriate methods of disposal.

TRANSPORT INFORMATION 14.

Disposal methods

DOT Not dangerous goods. **IATA** Not dangerous goods. ADR Not dangerous goods.

**REGULATORY INFORMATION** 15.

> **United States (TSCA)** All ingredients are on the inventory or exempt from listing. Canada (DSL / NDSL) All ingredients are on the inventory or exempt from listing.

Triton-X-100 (lysis buffer): CAS 9002-93-1Sulfuric Acid (stop solution): **SARA 302 Components** 

7664-93-9

Triton-X-100 (lysis buffer): Concentration <3%Sulfuric Acid (stop **SARA 313 Components** 

solution): Concentration <5%

No known hazards.

SARA 311/312 Hazards

California Prop. 65 Components

This product does not contain any Proposition 65 chemicals.

16. OTHER INFORMATION

Disclaimer

The above information was obtained from sources available at the time of revision and believed to be accurate and reliable. The information included is not intended to be all inclusive and should only be used as a guide. RayBiotech shall not be held liable for any damage resulting from

use, handling, or contact with the above product.

**Last Revised** 11/17/2015

