

1.	IDENTIFICATION	
	Product Identification	
	Product Name	Custom Human Phosphotyrosine ERK1/2 ELISA
	Catalog Number	PEL-ERK12-Y
	Usage	
	This product is furnished for LABORATO	DRY RESEARCH USE ONLY. Not for diagnostic or therapeutic use.
	Supplier Identification	
	Company	RayBiotech, Inc.
		3607 Parkway Lane, Suite 100
		Norcross, GA 30092
	Telephone	USA 1-888-494-8555 (Toll Free); 770-729-2992
	Fax	770-206-2393
	Website	www.RayBiotech.com
	Email	info@raybiotech.com
	Emergency Telephone Number Emergency Phone #	1-888-494-8555
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## 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

Signal Word

Hazard Statements



Warning

Triton-X-100 (lysis buffer): Harmful if swallowed; Risk of serious damage to eyes; Irritating to skin. Sulphuric Acid (stop solution): Harmful if inhaled.

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.

Eye Contact	Risk of serious damage to eyes.
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

Extinguishing Media	Use an extiguishing agent suitable for the surrounding fire, such as water spray, carbon dioxide, dry chemical power or appropriate foam. Prevent contact with skin and eyes.
Chemical Hazards from Fire	In a fire or if heated, a pressure increase will occur and the component 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	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
Protective Equipment	Wear respirator, chemical safety goggles, rubber boots and rubber gloves.

#### 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 (single exposure)	Not available
	Specific target organ toxicity (repeated exposure)	Not available
	Aspiration hazard	Not available
	Likely routes of exposure	Routes of entry anticipated: Oral, Dermal, Inhalation.
	Potential acute health effects	
	Eye contact	Triton-X-100 (lysis buffer): Risk of serious damage to eyes.
	Inhalation	Sulphuric Acid (stop solution): Harmful if inhaled.
	Ingestion Skin Contact	Triton-X-100 (lysis buffer): Skin irritant.
12.	ECOLOGICAL INFORMATION	
	Ecotoxicity	No data available
	Persistence and degradability	No data available
	<b>Bioaccumulation/accumulation</b>	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 methods	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 appropriate methods of disposal.
14.	TRANSPORT INFORMATION	
	DOT	Not dangerous goods.
	ΙΑΤΑ	Not dangerous goods.
	ADR	Not dangerous goods.
15.	<b>REGULATORY INFORMATION</b>	
	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.
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	SARA 302 Components	Triton-X-100 (Iysis buffer): CAS 9002-93-1Sulfuric Acid (stop solution): 7664-93-9
	SARA 313 Components	Triton-X-100 (lysis buffer): Concentration <3%Sulfuric Acid (stop solution): Concentration <5%
	SARA 311/312 Hazards	No known 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

