SAFETY DATA SHEET

Version 1.0
Revision Date March 3, 2022

1. IDENTIFICATION

Product Identification

Product Name RayPlex® Human T helper Cell Cytokine Array Kit

Catalog Number FAH-TH-1-50; FAH-TH-1-100; FAH-TH-1-200; FAH-TH-1-500

Item	Description	50 Tests	Per 100 Tests
1	RayPlex Multiplex Bead Cocktail	1.25 ml x 1 vial	1.25 ml x ***2*** vials
2	1X Assay Diluent	25 ml x 1 vial	25 ml x ***2*** vials
3	20X Wash Buffer	5 ml x 1 vial	5 ml x ***2*** vials
4	RayBio® Serum Diluent	2.5 ml x 1 vial	2.5 ml x ***2*** vials
5	Lyophilized Protein Standard Mix	1	1
6	10X Biotinylated Detection Antibody Cocktail	125 µl x 1 vial	125 µl x ***2*** vials
7	100X Streptavidin-PE	25 µl x 1 vial	25 µl x ***2*** vials
8	Flow Cytometer Setup Bead Cocktail**	100 µl x 1 vial	100 µl x 1 vial
9	V-bottom 96-well Microplate	1	1
10	Filter 96-well Microplate	1	1
11	Manual	1	1

Usage

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

Supplier Identification

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Emergency Phone # 1-888-494-8555

2. HAZARDS IDENTIFICATION

Hazardous Ingredients

There are no hazardous components in this product.

OSHA/HCS status

These materials are not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture

Not applicable

GHS Label Elements

Hazard Pictograms	Not applicable
Signal Word	Not applicable
Hazard Statements	Not applicable
Prevention	Use only outdoors or in a well-ventilated area. Avoid breathing vapor.
Response	IF INHALED: Go to fresh air and rest in a position comfortable for breathing. Call a POISON CENTER or physician you feel unwell.
Storage	Not applicable.
Disposal	Not applicable.

Hazards not otherwise classified

None known.

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3. COMPOSITION/INFORMATION ON INGREDIENTS

There are no 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.

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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.

Potential Acute Health Effects

Eye Contact	No known significant effects or critical hazards.
Skin Contact	No known significant effects or critical hazards
Inhalation	No known significant effects or critical hazards
Ingestion	No known significant effects or critical hazards

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.

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5. FIRE FIGHTING MEASURES

Extinguishing Media	Use an extinguishing 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.

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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 Clean 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

May be stored for up to 6 months at 4°C from the date of shipment. Avoid repeated freeze-thaw cycles. Lyophilized protein standard should be stored at -80°C.

Handling

Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container. Keep away from incompatible materials (see Section 10) and food and drink.

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

Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

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

Appearance	Clear.
Odor	Odorless
Physical State	Liquid
pH	N/A
Boiling Point	N/A
Melting Point	N/A
Freezing Point	N/A
Vapor Pressure	N/A
Vapor Density	N/A
Specific Gravity	N/A
Evaporation Rate	N/A
Solubility in Water	N/A
Odor Threshold	N/A
Coefficient of Water/Oil Distribution	N/A

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	Not available
Irritation/Corrosion	Not available
Sensitization	Not available
Mutagenicity	Not available
Classification	
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	No known significant effects or critical hazards.
Inhalation	Harmful if inhaled.
Ingestion	No known significant effects or critical hazards.
Skin Contact	No known significant effects or critical hazards.

12. ECOLOGICAL INFORMATION

Ecotoxicity	No data available
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 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.
IATA	Not dangerous goods.
ADR	Not dangerous goods.

15. REGULATORY INFORMATION

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.
Europe	In accordance with Regulation (EC) No. 1907/2006 of the European Parliament and the Council (REACH) and Commission Regulation (EU) No. 830/2015.
SARA 302 Components	No known hazards
SARA 313 Components	No known hazards
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.

This product is for research use only.