SAFETY DATA SHEET

IncuCyte® Human FabFluor-pH Red Antibody Labeling Reagent

1. IDENTIFICATION	
Product code:	Catalogue Number 4722
Product name:	IncuCyte® Human FabFluor-pH Red Antibody Labeling Reagent
Unit size:	50 µg
Manufacturer/supplier:	Essen BioScience Inc. 300 West Morgan Road Ann Arbor MI 48108 USA
Emergency contact:	+1 (734) 769-1600
Fax contact:	+1 (734) 769-7295

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

2. HAZARD IDENTIFICATION	
Classification:	GHS Mixture, GHS category 5 Acute Aquatic 3 H402
GHS label elements, including precautionary statements:	
GHS Symbol:	None required.
GHS Signal word:	Warning
GHS Hazard statement:	May be harmful if swallowed.
GHS Precautionary statement:	If swallowed call a poison center/doctor/physician if you feel unwell.

3. COMPOSITION / INFORMATION ON INGREDIENTS				
Chemical Name	RTECS#	CAS#	EC#	% (w/w)
Sodium Phosphate	WC4500000	7558-79-4	231-448-7	1.5
IncuCyte® FabFluor-pH Goat Anti-Human Fcγ Specific	N/A	N/A	N/A	1.7
Sodium Chloride	V24725000	7647-14-5	231-598-3	15.7
Bovine Serum Albumin	N/A	N/A	N/A	N/A
Non-Hazardous, Proprietary Ingredient	N/A	N/A	N/A	N/A

N/A means not applicable or proprietary information. The specific chemical identity and/or exact percentage of composition have been withheld as a trade secret [29CFR1910.1200].

4. FIRST-AID MEASURES	
Inhalation:	Remove person to fresh air. If inflammation occurs, get medical attention.
Skin contact:	Basic hygiene should prevent any problems. If contact with this product leads to reddening, inflammation, or irritation, flush exposed area with running water and get medical attention.
Eye Contact:	If this product enters the eyes, flush the eyes with gently running water for at least 15 minutes. If inflammation occurs, get medical attention.
Ingestion:	Wash out mouth with water. Do not induce vomiting unless directed by medical personnel. No special precautions are taken to remove or detect the presence of endotoxin or pyrogens. If fever or adverse effects are experienced, get medical attention.

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5. FIRE-FIGHTING MEASURES	
Suitable extinguishing media:	Use an extinguishing agent suitable for the surrounding fire.
Unsuitable extinguishing media:	None are known.
Conditions of flammability:	Not flammable or combustible.
Specific hazards in case of fire:	None are known.
Special protective equipment and precautions for fire fighters:	For fires in enclosed areas, wear a self-contained breathing apparatus. Do not inhale combustion gases.

6. ACCIDENTAL RELEASE MEASURES	
Personal precautions:	Use an extinguishing agent suitable for the surrounding fire.
Environmental precautions:	None are known.
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. Alternatively, 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. 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. Dispose of via licensed waste disposal contractor.

7. HANDLING AND STORAGE	
Precautions for safe handling:	Do not eat, drink, or smoke when using this product. Avoid contact with skin and eyes. Wash hands thoroughly after handling.
Conditions for safe storage, including any incompatibilities:	Store at 2-8°C. When ready to use, rehydrate with dH2O and centrifuge if not clear. Product is stable for about 6 weeks at 2-8°C as an undiluted liquid. Prepare working dilution fresh each day. For extended storage after rehydration, aliquot and freeze at -70°C or below. Avoid repeated freezing and thawing. Alternatively, add an equal volume of glycerol (ACS grade or better) for a final glycerol concentration of 50%, and store at -20°C as a liquid. Note: adding glycerol reduces the stated protein concentration and dilution range by one-half. Store in original container away from incompatible materials and from food and drink. Do not store in an unlabeled container. Use appropriate containment to avoid environmental contamination. Consult Product Specification sheets for additional storage information.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION			
Control parameters:	This product or any of its ingredients have no listed OSHA PEL, NIOSH REL, or ACGIH Threshold Limit Values (TLV).		
	USA ACGIH USA ACGIH USA NIOSH USA NIOSH	ACGIH Ceiling (ppm) ACGIH chemical category NIOSH REL (ceiling) (mg/m^3) NIOSH REL (ceiling) (ppm)	0.11 ppm (vapor) Not Classifiable as a Human Carcinogen 0.3 mg/m^3 0.1 ppm
Appropriate engineering controls:	No special ventilation requirements. Good general ventilation should be sufficient to control worker exposure to airborne contaminants. If this product contains ingredients with exposure limits, use process enclosures, local exhaust ventilation, or other engineering controls to keep worker exposure below any recommended or statutory limits.		

Individual protection measures, such as personal Protective Equipment:	
Respiratory protection:	Use a properly-fitted, air-purifying, or air-fed respirator complying with an approved standard if a risk assessment indicates this is a necessity. Respirator selection must be on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
Hygiene measures:	Safety eye wear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, or dusts.
Eye/face protection:	Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Skin and body protection:	Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Hand protection:	Chemical resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.
Skin and body protection:	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Environmental exposure controls:	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters, or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

9. PHYSICAL AND CHEMICAL PROPERTIES	
Appearance:	Neon Green solid.
Odor:	Odorless, as water.
Odor threshold:	Not available.
pH:	7.6 when rehydrated with indicated volume of H_2O.
Melting point/freezing point:	Data is not available.
Initial boiling point and boiling range:	Data is not available.
Flash point:	Data is not available.
Evaporation rate:	Data is not available.
Flammability:	Data is not available.
Burning time:	Data is not available.
Burning rate:	Data is not available.
Upper/lower flammability or explosive limits:	Data is not available.
Vapor pressure:	Data is not available.
Vapor density:	Data is not available.
Relative density:	Data is not available.
Solubility(ies):	Data is not available.
Partition coefficient:	Data is not available.
Auto-ignition temperature:	Data is not available.

Decomposition temperature:	Data is not available.
Viscosity:	Data is not available.
Explosive properties:	Data is not available.
Oxidizing properties:	Data is not available.
Other information:	No additional information

10. STABILITY AND REACTIVITY	
Reactivity:	No specific test data related to reactivity available for this product or its ingredients.
Chemical stability:	The product is chemically stable.
Possibility of hazardous reactions:	Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid:	No specific data.
Incompatible materials:	No specific data.
Hazardous decomposition products:	Under normal conditions of storage and use, hazardous decomposition products will not be produced.

11. TOXICOLOGICAL INFORMATION	
Information on toxicological effects:	
Acute toxicity	
Sodium Chloride:	Oral Rat, LD50, 3,000 mg/kg
Sodium Phosphate:	Oral Rat, LD50, 17,000 mg/kg
Antibody/Serum Protein:	Not established.
Skin Corrosion/Irritation:	Conclusion/Summary: Not available.
Serious Eye Damage/Irritation:	No known significant effects or critical hazards.
Respiratory or skin irritation:	No known significant effects or critical hazards.
Germ Cell Mutagenicity:	Conclusion/Summary: Not available.
Carcinogenicity	
IARC:	No component of this product is present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed carcinogen by IARC.
NTP:	No component of this product is 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 is present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
Reproductive toxicity:	Conclusion/Summary: Not available.
STOT - single exposure:	Data is not available.
STOT - repeated exposure:	Data is not available.
Aspiration hazard:	Data is not available.
Information on the likely routes of exposure:	Routes of entry anticipated: Oral, Dermal, and Inhalation.
Potential acute health effects	
Inhalation:	No known significant effects or critical hazards.
Ingestion:	No known significant effects or critical hazards.
Skin contact:	No known significant effects or critical hazards.
Eye contact:	No known significant effects or critical hazards.

Symptoms related to the physical, chemical, and toxicological characteristics	
Inhalation:	No specific data.
Ingestion:	No specific data.
Skin contact:	No specific data.
Eye contact:	No specific data.
Delayed, immediate, and chronic effects from short-and long-term exposure	
Short-term exposure:	Not available.
Potential immediate effects:	Not available.
Potential delayed effects:	Not available.
Long-term effects:	Not available.
Potential immediate effects:	Not available.
Potential delayed effects:	Not available.
Potential chronic health effects	
Conclusion/Summary:	Not available.
General:	No known significant effects or critical hazards.
Carcinogenicity:	No known significant effects or critical hazards.
Mutagenicity:	No known significant effects or critical hazards.
Teratogenicity:	No known significant effects or critical hazards.
Developmental effects:	No known significant effects or critical hazards.
Fertility effects	No known significant effects or critical hazards.
Other Information:	Not available.

12. ECOLOGICAL INFORMATION	
Ecotoxicity:	Avoid release into environment. Runoff from fire control or dilution water may cause pollution.
Persistence and Degradability Conclusion/Summary:	Not available.
Bioaccumulative potential:	Not available.
Mobility in soil:	Not available.
Soil/water partition coefficient:	Not available.
Mobility:	Not available.
Results of PBT and vPvB assessment	
PBT:	Not applicable.
vPvB:	Not applicable.
Other adverse effects:	No known significant effects or critical hazards.

13. DISPOSAL CONSIDERATIONS	
Product:	Dispose of contents/containers in accordance with local/regional/national/international regulations. The generation of waste should be avoided or minimized wherever possible. Significant quantities of waste product residues should not be disposed of via the foul sewer but processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions, and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Uncontaminated waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains, and sewers.
Contaminated packaging:	The generation of waste should be avoided or minimized whenever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains, and sewers.

14. TRANSPORTATION INFORMATION				
	ADR/RID	ADN/ADNR	IMDG	IATA
UN Number	Not regulated for transport.	Not regulated for transport.	Not regulated for transport.	Not regulated for transport.
UN proper shipping name	Not regulated for transport.	Not regulated for transport.	–	–
Transport hazard class(es)	Not regulated for transport.	Not regulated for transport.	–	–
Packing group	–	–	–	–
Environmental hazards	No	No	No	No
Special precaution for user	Not regulated for transport.	Not regulated for transport.	Not regulated for transport.	Not regulated for transport.
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:	Not available.			

GHS Transport Regulations: Not hazardous in accordance with "DOT" regulations.

15. REGULATORY INFORMATION	
Safety, health, and environmental regulations specific for the product in question	
EU Regulation (EC) No. 1907/2006 (REACH):	Annex XIV - List of substances subject to authorization: Substances of very high concern: None of the components are listed. Annex XVII - Restrictions on the manufacture, placing on the market, and use of certain dangerous substances, mixtures, and articles: Not applicable.
Other EU Regulations	
Europe inventory:	Not determined.
Black List Chemicals:	Not listed.
Priority List Chemicals:	Not listed.
Integrated pollution prevention and control list (IPPC) - Air:	Not listed.

IPPC- Water:	Not listed.
National regulations:	Data not available.
United States of America GHS	
SARA Reporting Requirements:	This product is not subject to Section 302, 304, and 313 reporting requirements under the Superfund Amendment and Reauthorization Act.
Chemical SARA 302, SARA 304, and SARA 313 SARA Threshold Planning Quantity:	Not available.
TSCA Inventory Status:	Not available.
CERCLA Reporting Quantity (RQ):	Not available.
Other Federal Regulations:	Not available.

16. OTHER INFORMATION	
Other EU Regulations	
ATE	Acute Toxicity Estimate
CLP	Classification, Labeling, and Packaging [Regulation (EC) No. 1272/2008]
DNEL	Derived No Effect Level
EUH statement	CLP specific Hazard Statement
PNEC	Predicted No Effect Concentration
RRN	REACH Registration Number
Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]:	Not classified.
Literature used in preparation of this GHS/SDS:	Globally Harmonized System of Classification and Labelling of Chemicals (GHS), Fourth Revised Edition, United Nations, New York and Geneva, 2011
Full text abbreviation H Statements:	Not applicable.
Full text of classifications [CLP/GHS]:	Not applicable.
Full text of abbreviated R phrases:	Not applicable.
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