Product Datasheet

Red Blood Cell (RBC) Lysis Buffer
NBP2-29442

Unit Size: 50 ml

Store at 4C. Do not freeze.

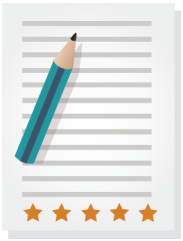
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NBP2-29442

Red Blood Cell (RBC) Lysis Buffer

Product Information

Unit Size	50 ml
Concentration	Please see the protocols for proper use of this product. If no protocol is available, contact technical services for assistance.
Storage	Store at 4C. Do not freeze.
Buffer	Dilute 10X RBC Lysis Buffer to 1X in deionized water before use (1 ml of 10X RBC lysis buffer with 9 ml of deionized water). Bring to room temperature prior to use.

Product Description

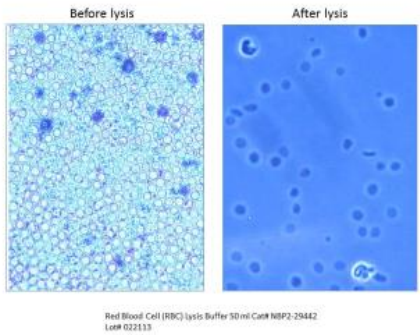
Species	Human, Mouse
Reactivity Notes	Mouse reactivity reported in scientific literature (PMID: 24371146). Human reactivity reported in scientific literature (PMID: 24080766)
Immunogen	The Red Blood Cell (RBC) Lysis Buffer is for optimal lysis of erythrocytes in single-cell suspensions of mouse hematopoietic issues such as spleen and human peripheral blood. This buffer contains ammonium chloride, which lyses red cells with minimal effect on lymphocytes. Nucleated red blood cells are not effectively lysed with ammonium chloride. RBC lysis is not necessary when working with mouse thymus and lymph node.

Product Application Details

Applications	Functional
Recommended Dilutions	Functional
Application Notes	Use in functional reported in scientific literature (PMID: 24371146)

Images

Red Blood Cell (RBC) Lysis Buffer [NBP2-29442] - data shows before (left) and after (right) human whole blood cells were lysed using the Red Blood Cell (RBC) lysis buffer. Image from verified customer review.



Publications

Ishida Y, Kimura A, Nosaka M et al. Detection of endothelial progenitor cells in human skin wounds and its application for wound age determination Int. J. Legal Med. 2015 Apr 07 [PMID: 25845667] (Func)

Gorocs Zoltan, Ling Yuye, Yu Meng Dai et al. Giga-pixel fluorescent imaging over an ultra-large field-of-view using a flatbed scanner. Lab Chip. 2013 Nov 21 [PMID: 24080766] (Human)

Pradhan N, Pratheek BM, Garai A et al. Induction of apoptosis by Fe(salen)Cl through caspase-dependent pathway specifically in tumor cells. Cell Biol. Int. 2014 May 07 [PMID: 24804954] (Red Blood Cell Lysis, Mouse)

Details:
Freshly isolated mouse splenocytes were kept in the RBC lysis buffer for 5 min to remove RBCs.

Gorocs ZS, Ling Y, Meng DY. Fluorescent imaging over an ultra-large field-of-view of 532 cm2 using a flatbed scanner. SPIE Proceedings 2014 Feb 01 (ICC/IF, Human)

Details:
White blood cells WBC isolated from whole blood using the RBC lysis buffer; the WBC were then mixed with Ethidium Bromide to fluorescently label them, Figs 3,4. Cellular Fractionation (remove red blood cells from whole blood).

Sturrock A, Mir-Kasimov M, Baker J et al. Key role of microRNA in the regulation of Granulocyte-macrophage colony stimulating factor expression in murine alveolar epithelial cells during oxidative stress. J Biol Chem 2013 Dec 26 [PMID: 24371146] (Func, Mouse)

Procedures

MSDS (NBP2-29442)
IDENTIFICATION
Product Name RBC Lysis Buffer (10x)
The product is provided as an aqueous buffer solution containing ammonium chloride, potassium bicarbonate and disodium EDTA.

HAZARDOUS INGREDIENTS
The solution does not contain hazardous materials, or the concentrations are below the regulatory threshold limits according to OSHA standard 29CFR 1910.1200.

PHYSICAL DATA
Physical state: Odorless, colorless, clear liquid
Boiling point: Undetermined
Melting point: Undetermined
Vapor pressure: Not applicable
Vapor density: Not Applicable
Solubility in water: Soluble

REACTIVITY DATA
The product has no known dangerous reactions or dangerous decomposition products. Avoid strong oxidizers.

FIRE AND EXPLOSION HAZARD DATA
There is no unusual fire and explosion hazard associated with this product.
Flash point: Not applicable
Flammable Limits in Air: Not applicable
Extinguishing media: Water, carbon dioxide, dry chemical powder, alcohol resistant foam
Fire fighting procedures: Wear self-contained breathing apparatus. Wear fully protective suit.

HEALTH HAZARD DATA
Based on our knowledge, when used and handled according to specification, the product does not have
harmful effects.
Ingestion: May be harmful if swallowed
Skin contact: No irritating effect
Eye contact: No irritating effect
Emergency first aid procedures:
Skin: Immediately wash with water and soap. Rinse with water thoroughly.
Eyes Flush immediately with water for at least 15 minutes.
Inhaled: Supply with fresh air or oxygen.
Ingested: Immediately wash mouth with plenty of water. Consult doctor if discomfort persists.

SPILL, LEAK AND DISPOSAL PROCEDURES
If spilled or leaked, collect on absorbent. Small quantity can be disposed with solid waste. Disposal should be in accordance with ALL FEDERAL, STATE, and LOCAL ENVIRONMENTAL REGULATIONS. This product is not considered a RCRA hazardous waste.

PROTECTION INFORMATION
Follow good laboratory practice when handling this product. The precautionary measures are as follows:
Eye protection: Laboratory safety goggles
Hands: Chemical resistant gloves
Skin: Laboratory protective clothing
Respiratory: Fume hood or in areas with adequate ventilation/exhaustion.

SPECIAL PRECAUTIONS
Store at 2-8 degrees C in well-sealed container. Store away from strong oxidizing agents. This product is
intended for research use only.

DISCLAIMER
For R&D use only. Not for drug, household or other uses.

WARRANTY
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