# **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.

<b>Product Description</b>	
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 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**

Gao L, Zhu L, Shen C et al. The transdermal cream of Formestane anti-breast cancer by controlling PI3K-Akt pathway and the tumor immune microenvironment Frontiers in immunology 2023-03-28 [PMID: 37056757] (Flow Cytometry, Rat)

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. 2015-04-07 [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. 2013-11-21 [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. 2014-05-07 [PMID: 24804954] (Red Blood Cell Lysis, Mouse)

#### Details:

Mouse splenocytes, human PBMC, Jurkat, EL4: Fig 5. GADPH was detected at ~36 kDa.

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 2013-12-26 [PMID: 24371146] (Func, Mouse)



#### **Procedures**

#### MSDS (NBP2-29442)

Red Blood Cell (RBC) Lysis Buffer:

**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:

Melting point:

Vapor pressure:

Vapor density:

Undetermined

Undetermined

Not applicable

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

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. NOVUS shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. Copyright 2008 NOVUS License granted to make unlimited paper copies for internal use only.





# **Novus Biologicals USA**

10730 E. Briarwood Avenue Centennial, CO 80112 USA

Phone: 303.730.1950 Toll Free: 1.888.506.6887

Fax: 303.730.1966

nb-customerservice@bio-techne.com

# Bio-Techne Canada 21 Canmotor Ave

21 Canmotor Ave Toronto, ON M8Z 4E6 Canada

Phone: 905.827.6400 Toll Free: 855.668.8722 Fax: 905.827.6402

canada.inquires@bio-techne.com

### **Bio-Techne Ltd**

19 Barton Lane Abingdon Science Park Abingdon, OX14 3NB, United Kingdom Phone: (44) (0) 1235 529449

Free Phone: 0800 37 34 15 Fax: (44) (0) 1235 533420 info.EMEA@bio-techne.com

# **General Contact Information**

www.novusbio.com Technical Support: nb-technical@biotechne.com

Orders: nb-customerservice@bio-techne.com

General: novus@novusbio.com

#### Limitations

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