

DESCRIPTION

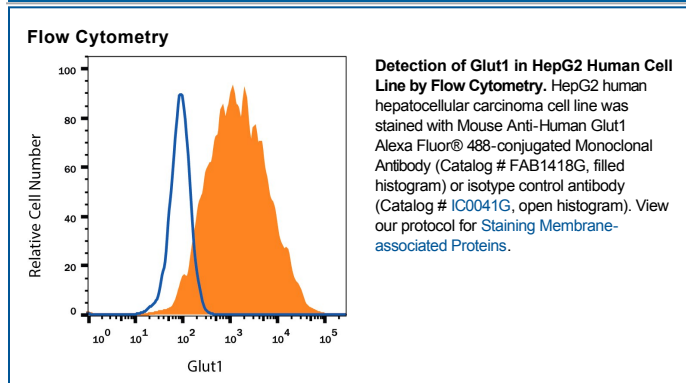
| | |
|---------------------------|--|
| Species Reactivity | Human |
| Specificity | Detects human Glut1. Stains human Glut1-transfected NS0 cells, but not NS0 control transfectants. Although Human Glut1 Antibody detects Glut1 on the surface of T cells (1, 2), it does not detect it on erythrocytes (5). The reason for this discrepancy is not understood, but may be related to conformational or post-translational modification differences. |
| Source | Monoclonal Mouse IgG _{2B} Clone # 202915 |
| Purification | Protein A or G purified from hybridoma culture supernatant |
| Immunogen | NS0 mouse myeloma cell line transfected with human Glut1 Met1-Val492 Accession # AAA52571 |
| Conjugate | Alexa Fluor 488 Excitation Wavelength: 488 nm Emission Wavelength: 515-545 nm |
| Formulation | Supplied in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details. *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions. |

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

| | Recommended Concentration | Sample |
|-----------------------|---------------------------------|-----------|
| Flow Cytometry | 0.25-1 µg/10 ⁶ cells | See Below |

DATA



PREPARATION AND STORAGE

| | |
|--------------------------------|--|
| Shipping | The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below. |
| Stability & Storage | Protect from light. Do not freeze. <ul style="list-style-type: none"> ● 12 months from date of receipt, 2 to 8 °C as supplied. |

BACKGROUND

Glut1 belongs to the facilitative glucose transport protein family that comprises 13 members. It is an integral membrane protein with 12 transmembrane domains and is expressed at variable levels in many tissues including brain endothelial cells, CD8⁺ T cells, and erythrocytes (1-4). Glut1 is a major glucose transporter that mediates glucose transport across the mammalian blood-brain barrier.

References:

1. Mueckler, M. *et al.* 1994, Eur. J. Biochem. **219**:713.
2. Mueckler, M. *et al.* 1985, Science **229**:941.
3. Jones, K.S. *et al.* 2006, J. Virol. 8291.
4. Takenouchi, N. *et al.* 2007, J. Virol. 1506.
5. Kinet, S. *et al.* 2007, Retrovirology **4**:31.

PRODUCT SPECIFIC NOTICES

This product is provided under an agreement between Life Technologies Corporation and R&D Systems, Inc, and the manufacture, use, sale or import of this product is subject to one or more US patents and corresponding non-US equivalents, owned by Life Technologies Corporation and its affiliates. The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). The sale of this product is expressly conditioned on the buyer not using the product or its components (1) in manufacturing; (2) to provide a service, information, or data to an unaffiliated third party for payment; (3) for therapeutic, diagnostic or prophylactic purposes; (4) to resell, sell, or otherwise transfer this product or its components to any third party, or for any other commercial purpose. Life Technologies Corporation will not assert a claim against the buyer of the infringement of the above patents based on the manufacture, use or sale of a commercial product developed in research by the buyer in which this product or its components was employed, provided that neither this product nor any of its components was used in the manufacture of such product. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, Cell Analysis Business Unit, Business Development, 29851 Willow Creek Road, Eugene, OR 97402, Tel: (541) 465-8300. Fax: (541) 335-0354.