

## DESCRIPTION

<b>Species Reactivity</b>	Human
<b>Specificity</b>	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.
<b>Source</b>	Monoclonal Mouse IgG <sub>2B</sub> Clone # 202915
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	NS0 mouse myeloma cell line transfected with human Glut1 Met1-Val492 Accession # AAA52571
<b>Conjugate</b>	Alexa Fluor 594 Excitation Wavelength: 590 nm Emission Wavelength: 617 nm
<b>Formulation</b>	Supplied 0.2 mg/mL 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.

	<b>Recommended Concentration</b>	<b>Sample</b>
<b>Flow Cytometry</b>	0.25-1 µg/10 <sup>6</sup> cells	HepG2 human hepatocellular carcinoma cell line (untreated) and Jurkat human acute T cell leukemia cell line cultured in nutrient-depleted media

## PREPARATION AND STORAGE

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

## 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<sup>+</sup> 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. Meuckler, 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

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