

## 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>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

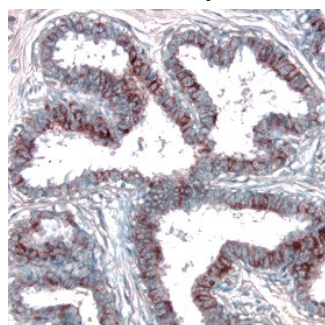
## APPLICATIONS

**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
<b>Flow Cytometry</b>	2.5 µg/10 <sup>6</sup> cells	HepG2 human hepatocellular carcinoma cell line
<b>Immunocytochemistry</b>	8-25 µg/mL	Immersion fixed HepG2 human hepatocellular carcinoma cell line
<b>Immunohistochemistry</b>	8-25 µg/mL	See Below

## DATA

### Immunohistochemistry



#### Glut1 in Human Breast Cancer Tissue.

Glut1 was detected in immersion fixed paraffin-embedded sections of human breast cancer tissue using Mouse Anti-Human Glut1 Monoclonal Antibody (Catalog # MAB1418) at 25 µg/mL overnight at 4 °C. Tissue was stained using the Anti-Mouse HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS002) and counterstained with hematoxylin (blue). Specific labeling was localized to the plasma membrane of epithelial cells. View our protocol for [Chromogenic IHC Staining of Paraffin-embedded Tissue Sections](#).

## PREPARATION AND STORAGE

<b>Reconstitution</b>	Reconstitute at 0.5 mg/mL in sterile PBS.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>● 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>● 6 months, -20 to -70 °C under sterile conditions after reconstitution.</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.