

Human Glut1 Fluorescein-conjugated Antibody

Monoclonal Mouse IgG_{2B} Clone # 202915

Catalog Number: FAB1418F 100 TESTS

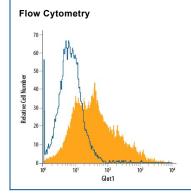
DESCRIPTION			
Species Reactivity	Human		
Specificity	Detects human Glut1. Stains human Glut1-transfected NS0 cells, but not NS0 control transfectants. Although Human Glut1 Antibody detect Glut1 on the surface of T cells (1, 2), it does not detect it on erythrocytes (5). The reason for this discrepancy is not understood, but may 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	Fluorescein Excitation Wavelength: 488 nm Emission Wavelength: 515-545 nm (FITC)		
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 Shee (SDS) for additional information and handling instructions.		

APPLICATIONS

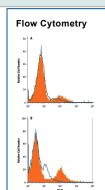
Please Note: Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.

	Recommended Concentration	Sample
Flow Cytometry	10 μL/10 ⁶ cells	See Below

DATA



Detection of Glut1 in HepG2 Human Cell Line by Flow Cytometry. HepG2 human hepatocellular carcinoma cell line was stained with Mouse Anti-Human Glut1 Fluorescein-conjugated Monoclonal Antibody (Catalog # FAB1418F, filled histogram) or isotype control antibody (Catalog # IC0041F, open histogram). View our protocol for Staining Membrane-associated Proteins.



Detection of Glut1 in Jurkat Human Cell Line by Flow Cytometry. Jurkat human acute T cell leukemia cell line either (A) untreated or (B) cultured in nutrient-depleted media was stained with Mouse Anti-Human Glut1 Fluorescein-conjugated Monoclonal Antibody (Catalog # FAB1418F, filled histogram) or isotype control antibody (Catalog # IC0041F, open histogram). View our protocol for Staining Membrane-associated Proteins.

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.

• 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. 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.

