GLUT-1 Monoclonal Mouse Antibody (GLUT1/2475)



Product Description

This antibody recognizes a protein of 55 kDa, which is identified as GLUT-1. Glucose transporters are integral membrane glycoproteins involved in transporting glucose into most cells. There are many types of glucose transport carrier proteins, designated as Glut-1 to Glut-12. Glut-1 is a major glucose transporter in the mammalian blood-brain barrier. It is expressed in high density on the membranes of human erythrocytes and the brain capillaries that comprise the blood-brain barrier. Glut-1 is expressed at variable levels in many human tissues. Overexpression of Glut-1 has been linked to tumor progression or poor survival of patients with carcinomas of the colon, breast, cervical, lung, bladder and mesothelioma. Glut-1 is a sensitive and specific marker for the differentiation of malignant mesothelioma (positive) from reactive mesothelium (negative). Primary antibodies are available purified, or with a selection of fluorescent CF® dyes and other labels. CF® dyes offer exceptional brightness and photostability. See the CF® Dye Brochure for more information. Note: Conjugates of blue fluorescent dyes like CF®405S and CF®405M are not recommended for detecting low abundance targets, because blue dyes have lower fluorescence and can give higher non-specific background than other dye colors. Stock status: Because Biotium offers a large number of antibody and conjugation options, primary antibody conjugates may be made to order. Typical lead times are up to one week for CF® dye and biotin conjugates, and up to 2-3 weeks for fluorescent protein and enzyme conjugates. Please email order@biotium.com to inquire about stock status and lead times before placing your order.

Shelf life

Regulatory status

Antibody/conjugate formulation

Validated in protein

Call us: 800-304-5357

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Product attributes				
Antibody number	#2475			
Antibody reactivity (target)	GLUT-1			
(target) Antibody type	Primary			
Host species	Mouse			
Clonality	Monoclonal			
Clone	GLUT1/2475			
Isotype	lgG2b, kappa			
Molecular weight	55 kDa			
Synonyms	Erythrocyte/hepatoma glucose transporter; Glucose transporter type-1; GLUT1; GLUT1DS; GLUTB; GTT; GTG1; Gtg3; HepG2 glucose transporter; PED; RATG13; Solute carrier family 2; Solute carrier family 2, facilitated glucose transporter member 1 (SLC2A1)			
Human gene symbol	SLC2A1			
Entrez gene ID	6513			
SwissProt	P11166			
Unigene	473721			
Immunogen	Recombinant fragment of human GLUT1 protein (around aa 203-305) (exact sequence is proprietary)			
Antibody target cellular	Plasma membrane			
Verified antibody applications	Flow (verified), IF (verified), IHC (FFPE) (verified), WB (verified)			
Species reactivity	Human			
Antibody application notes	Higher concentration may be required for direct detection using primary antibody conjugates than for indirect detection with secondary antibody, ELISA: 1-2 ug/mL, for coating order Ab without BSA, Immunohistology (formalin): 0.5-1 ug/mL for 30 minutes at RT, Staining of formalin-fixed tissues requires boiling tissue sections in 10 mM citrate buffer, pH 6.0, for 10-20 minutes followed by cooling at RT for 20 minutes, Optimal dilution for a specific application should be determined by user			
Positive control	MDA-MB-231 cells or erythrocytes. Mesothelioma or breast, colon and ovarian carcinoma.			
Shipping condition	Room temperature			
Storage Conditions	Store at 2 to 8 °C, Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 °C			

Guaranteed for at least 24 months from date of receipt when stored as recommended

Conjugates: 0.1 mg/mL in PBS/0.1% BSA/0.05% azide, HRP conjugates: 0.1 mg/mL in PBS/0.05% BSA, Purified: 0.2 mg/mL in PBS/0.05% BSA, Purified: 0.2 mg/mL in PBS/0.05% BSA/0.05% azide, Purified, BSA-free: 1 mg/mL in PBS without azide

For research use only (RUO)

Antibody research areas Cancer, Metabolism, Transporters

Email: btinfo@biotium.com

Antibody # prefix BNC04	Conjugation CF®405S	Ex/Em (nm) 404/431	Laser line 405	Detection channel DAPI (microscopy), AF405	Dye Features CF®405S Features
BNC88	CF®488A	490/515	488	GFP, FITC	CF®488A Features
BNC68	CF®568	562/583	532, 561	RFP, TRITC	CF®568 Features
BNC94	CF®594	593/614	561	Texas Red®	CF®594 Features
BNC40	CF®640R	642/662	633-640	Cy®5	CF®640R Features
BNC47	CF®647	650/665	633-640	Cy®5	CF®647 Features
BNCB	Biotin	N/A	N/A	N/A	
BNUB	Purified	N/A	N/A	N/A	
BNUM	Purified,	N/A	N/A	N/A	

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