

Datasheet for ABIN7043693

anti-GLUT1 antibody (Extracellular) (FITC)



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2 Images

Overview

Quantity:	50 µL
Target:	GLUT1 (SLC2A1)
Binding Specificity:	AA 41-55, Extracellular
Reactivity:	Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This GLUT1 antibody is conjugated to FITC
Application:	Flow Cytometry (FACS)

Product Details

Purpose:	A Rabbit Polyclonal Antibody to Glucose Transporter 1 Conjugated to the Fluorescent Dye FITC
Immunogen:	Immunogen: Synthetic peptide Immunogen Sequence: (C)EEFYNQTNHRYGES, corresponding to amino acid residues 41-55 of rat GLUT1
Isotype:	IgG
Specificity:	1st extracellular loop
Cross-Reactivity:	Human, Mouse, Rat
Predicted Reactivity:	Mouse,human - 14,15 amino acid residues identical
Characteristics:	Anti-GLUT1 (extracellular) Antibody (ABIN7043692, ABIN7044497 and ABIN7044498) is a highly specific antibody directed against an epitope of the rat protein. The antibody can be used

Product Details

in western blot and indirect live cell flow cytometry applications. It has been designed to recognize GLUT1 from human, rat, and mouse samples. \nAnti-GLUT1 (extracellular)-FITC Antibody (ABIN7043692, ABIN7044497 and ABIN7044498)-F) is directly conjugated to fluorescein isothiocyanate (FITC). The antibody can be used in immunofluorescent applications such as direct live cell flow cytometry.

Purification: Affinity purified on immobilized antigen.

Target Details

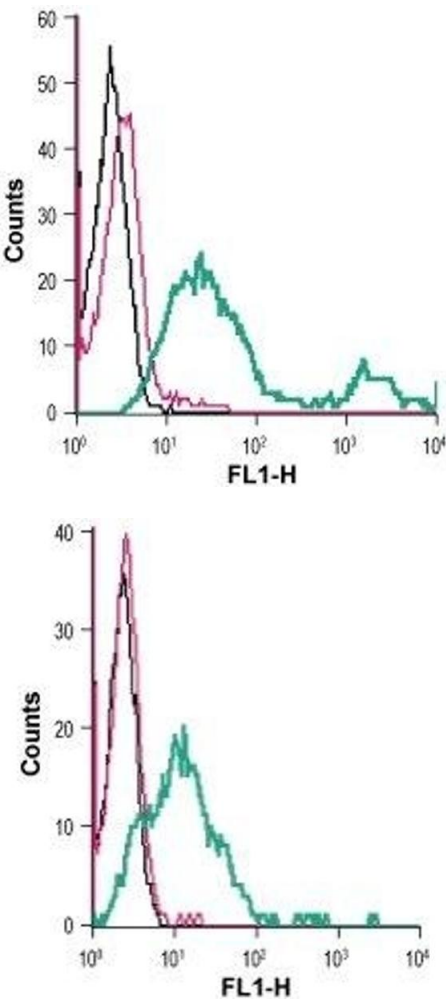
Target:	GLUT1 (SLC2A1)
Alternative Name:	SLC2A1 (SLC2A1 Products)
Background:	Glucose transporter 1, Facilitated glucose transporter member 1, SLC2A1,Glucose transporter 1 (GLUT1) belongs to the major facilitator superfamily (MFS). It is encoded by SLC2A1, and mediates basal-level cellular uptake of glucose into many tissues. GLUT1 contains 12 membrane-spanning domains with both the amino and carboxyl termini oriented intracellularly. In addition, a single extracellular N-linked glycosylation site is present1.GLUT1 is widely expressed, but it is most abundant in fibroblasts, erythrocytes, and endothelial cells with low levels of expression in muscle, liver, and adipose tissue2.Inactivating mutations of GLUT1, resulting in compromised transport activities for glucose, are associated with diseases as a result of lack of energy supply to the brain3. GLUT1 deficiency syndrome (also known as De Vivo syndrome) is characterized by a spectrum of symptoms including early-onset seizures, microcephaly and retarded development4. In addition, elevated expression levels of GLUT1 have been observed in several cancer types, identifying GLUT1 as an important prognostic indicator for tumorigenesis5. Alternative names: GLUT1, Glucose transporter 1, Facilitated glucose transporter member 1, SLC2A1
Gene ID:	24778
NCBI Accession:	NM_006516
UniProt:	P11167
Pathways:	Sensory Perception of Sound , Dicarboxylic Acid Transport , Warburg Effect

Application Details

Application Notes:	Antigen preadsorption control: 1 µg peptide per 1 µg antibody Application Dilutions Immunohistochemistry paraffin embedded sections ihc: N/A Application Dilutions Western blot wb: N/A
Comment:	Negative Control: (ABIN7582044) Blocking Peptide: (ABIN7236994)
Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Reconstitution:	15 µL or 50 µL double distilled water (DDW), depending on the sample size.
Concentration:	1 mg/mL
Buffer:	PBS pH 7.4, 1 % BSA with 0.05 % sodium azide
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C,-20 °C
Storage Comment:	Storage before reconstitution: The antibody ships as a lyophilized powder at room temperature. Upon arrival, it should be stored at -20°C. Storage after reconstitution: The reconstituted solution can be stored at 4°C, protected from the light, for up to 1 week. For longer periods, small aliquots should be stored at -20°C. Avoid multiple freezing and thawing. Centrifuge all antibody preparations before use (10000 x g 5 min).



Flow Cytometry

Image 1. Cell surface detection of GLUT1 in mouse TK-1 T-cell lymphoma cells: (black line) Cells.(red line) Cells + Rabbit IgG isotype control-FITC.(green line) Cells + Anti-GLUT1 (extracellular)-FITC Antibody (ABIN7043693, ABIN7045565, ABIN7045566 and ABIN7045567), (5 µg).

Flow Cytometry

Image 2. Cell surface detection of GLUT1 in human K562 chronic myeloid leukemia cells: (black line) Cells.(red line) Cells + Rabbit IgG isotype control-FITC.(green line) Cells + Anti-GLUT1 (extracellular)-FITC Antibody (ABIN7043693, ABIN7045565, ABIN7045566 and ABIN7045567), (5 µg).