10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-GLUT1 Antibody

Catalog # AP51519

Product Information

Application	WB, IHC
Primary Accession	P11166
Reactivity	Human, Mouse, Rat, Rabbit, Pig, Bovine, Dog, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	54084

Additional Information

Gene ID	6513
Other Names	GLUT1; Solute carrier family 2, facilitated glucose transporter member 1; Glucose transporter type 1, erythrocyte/brain; GLUT-1; HepG2 glucose transporter
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human GLUT1. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000) IHC~~1:100~500
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

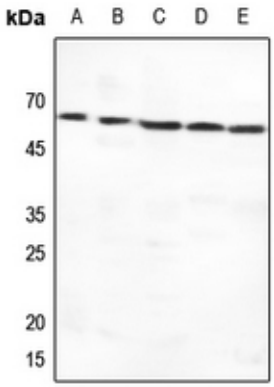
Name	SLC2A1 (HGNC:11005)
Function	Facilitative glucose transporter, which is responsible for constitutive or basal glucose uptake (PubMed:10227690, PubMed:10954735, PubMed:18245775, PubMed:19449892, PubMed:25982116, PubMed:27078104, PubMed:32860739). Has a very broad substrate specificity; can transport a wide range of aldoses including both pentoses and hexoses (PubMed:18245775, PubMed:19449892). Most important energy carrier of the brain: present at the blood-brain barrier and assures the energy-independent, facilitative transport of glucose into the brain (PubMed:10227690). In association with BSG and NXNL1, promotes retinal cone survival by increasing glucose uptake into photoreceptors (By similarity). Required for mesendoderm differentiation (By similarity).
Cellular Location	Cell membrane; Multi-pass membrane protein. Melanosome. Photoreceptor inner segment {ECO:0000250|UniProtKB:P17809}. Note=Localizes primarily at

	the cell surface (PubMed:18245775, PubMed:19449892, PubMed:23219802, PubMed:24847886, PubMed:25982116). Identified by mass spectrometry in melanosome fractions from stage I to stage IV (PubMed:17081065)
Tissue Location	Detected in erythrocytes (at protein level). Expressed at variable levels in many human tissues

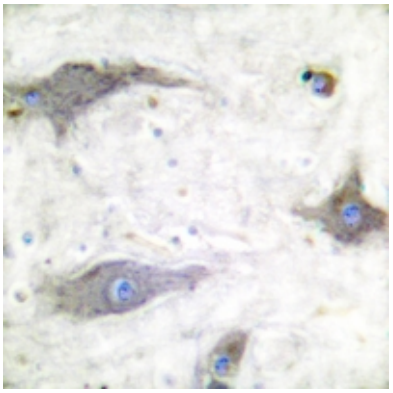
References

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Ota T.,et al.Nat. Genet. 36:40-45(2004).
Mural R.J.,et al.Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases.
Fukumoto H.,et al.Diabetes 37:657-661(1988).
Yu W.,et al.Submitted (JUN-1998) to the EMBL/GenBank/DDBJ databases.

Images



Western blot analysis of GLUT1 expression in HEK293T (A), Hela (B), HGC27 (C), mouse lung (D), rat lung (E) whole cell lysates. (Predicted band size: 54 kD; Observed band size: 55 kD)



Immunohistochemical analysis of GLUT1 staining in human brain formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.