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SLC2A1 Blocking Peptide (C-term)

Synthetic peptide
Catalog # BP19992b

Specification

SLC2A1 Blocking Peptide (C-term) - Product Information

Primary Accession	P11166
Other Accession	P11167, P13355, P20303, P17809, P46896, P27674, NP_006507.2, P79365

SLC2A1 Blocking Peptide (C-term) - Additional Information

Gene ID 6513

Other Names
Solute carrier family 2, facilitated glucose transporter member 1, Glucose transporter type 1, erythrocyte/brain, GLUT-1, HepG2 glucose transporter, SLC2A1, GLUT1

Target/Specificity
The synthetic peptide sequence is selected from aa 453-464 of HUMAN SLC2A1

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

SLC2A1 Blocking Peptide (C-term) - Protein Information

Name SLC2A1 (HGNC:11005)

SLC2A1 Blocking Peptide (C-term) - Background

This gene encodes a major glucose transporter in the mammalian blood-brain barrier. Mutations in this gene have been found in a family with paroxysmal exertion-induced dyskinesia.

SLC2A1 Blocking Peptide (C-term) - References

Mullen, S.A., et al. Neurology 75(5):432-440(2010)
Grabellus, F., et al. J. Nucl. Med. 51(8):1191-1197(2010)
Koda, M., et al. BMC Cancer 10, 320 (2010) :
Kim, S.J., et al. J. Exp. Clin. Cancer Res. 29, 69 (2010) :
Xiong, Y., et al. Eur. J. Gynaecol. Oncol. 31(2):160-164(2010)

Function

Facilitative glucose transporter, which is responsible for constitutive or basal glucose uptake (PubMed:18245775, PubMed:19449892, PubMed:25982116, PubMed:27078104, PubMed:10227690). 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).

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:25982116, PubMed:24847886). 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

SLC2A1 Blocking Peptide (C-term) - Protocols

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Provided below are standard protocols that you may find useful for product applications.

- Blocking Peptides