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SLC29A3 Antibody (N-term) Blocking peptide
Synthetic peptide
Catalog # BP12865a

Specification

SLC29A3 Antibody (N-term) Blocking peptide - Product Information

Primary Accession Q9BZD2

SLC29A3 Antibody (N-term) Blocking peptide - Additional Information

Gene ID 55315

Other Names
Equilibrative nucleoside transporter 3, hENT3, Solute carrier family 29 member 3, SLC29A3, ENT3

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.

SLC29A3 Antibody (N-term) Blocking peptide - Protein Information

Name SLC29A3 (HGNC:23096)

Synonyms ENT3

Function
Uniporter that mediates the facilitative transport of nucleoside across lysosomal and mitochondrial membranes (PubMed:15701636, PubMed:19164483, PubMed:20595384, PubMed:28729424). Functions as a non-electrogenic Na(+)-independent transporter (PubMed:15701636, PubMed:19164483, PubMed:28729424). Substrate transport is pH-dependent and enhanced under acidic condition, probably reflecting the location of the transporter in acidic intracellular compartments (PubMed:15701636, PubMed:19164483, PubMed:28729424). Proton is not a cotransporting ion but most likely change the ionization state of the transporter which dictates transport- permissible/impermissible conformation for nucleoside translocation (PubMed:<a

href="http://www.uniprot.org/citations/28729424" target="_blank">28729424). May direct the nucleoside transport from lysosomes to cytosol or cytosol to mitochondria to facilitate the fundamental function of salvage synthesis of nucleic acids (PubMed:28729424). Involved in the transport of nucleosides (adenosine, guanosine, uridine, thymidine, cytidine and inosine) and deoxynucleosides (deoxyadenosine, deoxycytidine) (PubMed:15701636, PubMed:19164483, PubMed:20595384, PubMed:28729424). Also mediates transport of purine nucleobases (adenine, guanine) and pyrimidine nucleobases (uracil) (PubMed:15701636, PubMed:19164483). Also able to transport monoamine neurotransmitters dopamine, serotonin, noradrenaline and tyramine (PubMed:19164483). Capable of transporting ATP (PubMed:19164483). Mediates nucleoside export from lysosomes in macrophages, which regulates macrophage functions and numbers (By similarity).

Cellular Location
Lysosome membrane; Multi-pass membrane protein. Late endosome membrane; Multi-pass membrane protein. Mitochondrion membrane; Multi-pass membrane protein. Cell membrane; Multi-pass membrane protein. Note=Observed in a punctate intracellular pattern showing partial colocalization with late endosomes/lysosomes (PubMed:15701636). Detected at the cell surface only in certain placental cells (PubMed:19164483)

Tissue Location
Widely expressed in both adult and fetal tissues (PubMed:15701636). Highest levels in placenta, uterus, ovary, spleen, lymph node and bone marrow (PubMed:15701636). Expressed in liver (PubMed:19164483). Lowest levels in brain and heart (PubMed:15701636) Expressed in macrophages (PubMed:22174130)

SLC29A3 Antibody (N-term) Blocking peptide - Protocols

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

- Blocking Peptides

SLC29A3 Antibody (N-term) Blocking peptide - Images

SLC29A3 Antibody (N-term) Blocking peptide - Background

This gene encodes a nucleoside transporter. The encodedprotein plays a role in cellular uptake of nucleosides,nucleobases, and their related analogs. Mutations in this gene havebeen associated with H syndrome, which is characterized bycutaneous hyperpigmentation and hypertrichosis, hepatosplenomegaly,heart anomalies, and hypogonadism. A related disorder, PHID(pigmented hypertrichosis with insulin-dependent diabetesmellitus), has also been associated with mutations at this locus.Alternatively spliced transcript variants have been described.

SLC29A3 Antibody (N-term) Blocking peptide - References

Gass, N., et al. J Affect Disord 126 (1-2), 134-139 (2010) :Kang, N., et al. J. Biol. Chem. 285(36):28343-28352(2010)Li, X., et al. Zhongguo Fei Ai Za Zhi 13(5):458-463(2010)Priya, T.P., et al. Br. J. Dermatol. 162(5):1132-1134(2010)Cliffe, S.T., et al. Hum. Mol. Genet. 18(12):2257-2265(2009)