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SLC29A2 Blocking Peptide (N-Term)

Synthetic peptide
Catalog # BP22096a

Specification

SLC29A2 Blocking Peptide (N-Term) - Product Information

Primary Accession Q14542

SLC29A2 Blocking Peptide (N-Term) - Additional Information

Gene ID 3177

Other Names
Equilibrative nucleoside transporter 2, 36 kDa nucleolar protein HNP36, Delayed-early response protein 12, Equilibrative nitrobenzylmercaptopurine riboside-insensitive nucleoside transporter, Equilibrative NBMPR-insensitive nucleoside transporter, Hydrophobic nucleolar protein, 36 kDa, Nucleoside transporter, ei-type, Solute carrier family 29 member 2, SLC29A2, DER12, ENT2, HNP36

Target/Specificity
The synthetic peptide sequence is selected from aa 1-11 of HUMAN SLC29A2

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.

SLC29A2 Blocking Peptide (N-Term) - Protein Information

Name SLC29A2 (HGNC:11004)

Synonyms DER12, ENT2, HNP36

Function
Bidirectional uniporter involved in the facilitative transport of nucleosides and nucleobases, and contributes to maintaining their cellular homeostasis (PubMed:10722669, PubMed:12527552, PubMed:12590919, PubMed:16214850, PubMed:21795683, PubMed:9396714, PubMed:9478986). Functions as a Na(+)-independent, passive transporter (PubMed:<a

href="http://www.uniprot.org/citations/9478986" target="_blank">9478986). Involved in the transport of nucleosides such as inosine, adenosine, uridine, thymidine, cytidine and guanosine (PubMed:10722669, PubMed:12527552, PubMed:12590919, PubMed:16214850, PubMed:21795683, PubMed:9396714, PubMed:9478986). Also able to transport purine nucleobases (hypoxanthine, adenine, guanine) and pyrimidine nucleobases (thymine, uracil) (PubMed:16214850, PubMed:21795683). Involved in nucleoside transport at basolateral membrane of kidney cells, allowing liver absorption of nucleoside metabolites (PubMed:12527552). Mediates apical nucleoside uptake into Sertoli cells, thereby regulating the transport of nucleosides in testis across the blood-testis-barrier (PubMed:23639800). Mediates both the influx and efflux of hypoxanthine in skeletal muscle microvascular endothelial cells to control the amount of intracellular hypoxanthine available for xanthine oxidase-mediated ROS production (By similarity).

Cellular Location
Apical cell membrane; Multi-pass membrane protein. Basolateral cell membrane; Multi-pass membrane protein. Note=Localized to the apical membrane of Sertoli cells.

Tissue Location
Highly expressed in skeletal muscle (PubMed:9478986). Expressed in liver, lung, placenta, brain, heart, kidney and ovarian tissues (PubMed:9478986). Expressed in testis at the blood-brain-barrier (PubMed:23639800).

SLC29A2 Blocking Peptide (N-Term) - Protocols

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

- Blocking Peptides

SLC29A2 Blocking Peptide (N-Term) - Images

SLC29A2 Blocking Peptide (N-Term) - Background

Mediates equilibrative transport of purine, pyrimidine nucleosides and the purine base hypoxanthine. Very less sensitive than SLC29A1 to inhibition by nitrobenzylthioinosine (NBMPR), dipyridamole, dilazep and draflazine.

SLC29A2 Blocking Peptide (N-Term) - References

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Griffiths M.,et al.Biochem. J. 328:739-743(1997).
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Ota T.,et al.Nat. Genet. 36:40-45(2004).