

SLC22A6 Antibody (C-Term) Blocking Peptide Synthetic peptide Catalog # BP9237b

Specification

SLC22A6 Antibody (C-Term) Blocking Peptide - Product Information

Primary Accession Other Accession

<u>Q4U2R8</u> <u>NP_004781</u>

SLC22A6 Antibody (C-Term) Blocking Peptide - Additional Information

Gene ID 9356

Other Names Solute carrier family 22 member 6, Organic anion transporter 1, hOAT1, PAH transporter, hPAHT, Renal organic anion transporter 1, hROAT1, SLC22A6, OAT1, PAHT

Target/Specificity

The synthetic peptide sequence used to generate the antibody AP9237b was selected from the C-Term region of human SLC22A6. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

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.

SLC22A6 Antibody (C-Term) Blocking Peptide - Protein Information

Name SLC22A6 (HGNC:10970)

Synonyms OAT1, PAHT

Function

Secondary active transporter that functions as a Na(+)- independent organic anion (OA)/dicarboxylate antiporter where the uptake of one molecule of OA into the cell is coupled with an efflux of one molecule of intracellular dicarboxylate such as 2-oxoglutarate or glutarate (PubMed:9950961, PubMed:11907186, PubMed:11907186, PubMed:11669456, PubMed:11669456, PubMed:2108572, PubMed:2108572,



PubMed:23832370, PubMed:28534121). Mediates the uptake of OA across the basolateral side of proximal tubule epithelial cells, thereby contributing to the renal elimination of endogenous OA from the systemic circulation into the urine (PubMed:9887087). Functions as a biopterin transporters involved in the uptake and the secretion of coenzymes tetrahydrobiopterin (BH4), dihydrobiopterin (BH2) and sepiapterin to urine, thereby determining baseline levels of blood biopterins (PubMed: 28534121). Transports prostaglandin E2 (PGE2) and prostaglandin F2-alpha (PGF2-alpha) and may contribute to their renal excretion (PubMed:11907186). Also mediates the uptake of cyclic nucleotides such as cAMP and cGMP (PubMed:26377792). Involved in the transport of neuroactive tryptophan metabolites kynurenate (KYNA) and xanthurenate (XA) and may contribute to their secretion from the brain (PubMed: 22108572, PubMed:23832370). May transport glutamate (PubMed:26377792). Also involved in the disposition of uremic toxins and potentially toxic xenobiotics by the renal organic anion secretory pathway, helping reduce their undesired toxicological effects on the body (PubMed:11669456, PubMed:14675047). Uremic toxins include the indoxyl sulfate (IS), hippurate/Nbenzoylglycine (HA), indole acetate (IA), 3-carboxy-4- methyl-5-propyl- 2-furanpropionate (CMPF) and urate (PubMed: 14675047, PubMed:26377792). Xenobiotics include the mycotoxin ochratoxin (OTA) (PubMed:11669456). May also contribute to the transport of organic compounds in testes across the blood-testis-barrier (PubMed:35307651).

Cellular Location

Basolateral cell membrane; Multi-pass membrane protein. Basal cell membrane; Multi-pass membrane protein. Note=Localized to the basolateral membrane of renal proximal tubular cells (PubMed:9887087) Localized to the basal membrane of Sertoli cells (PubMed:35307651)

Tissue Location

Strongly expressed in kidney (PubMed:9887087, PubMed:9950961, PubMed:10049739, PubMed:10462545, PubMed:10964714) Expressed at lower level in liver, skeletal muscle, brain and placenta (PubMed:9887087, PubMed:9950961, PubMed:10049739, PubMed:10462545). In kidney, found at the basolateral membrane of the proximal tubule (PubMed:9887087). In testis, primarily localized to the basal membrane of Sertoli cells and weakly expressed in Leydig cells and vascular endothelial cells (PubMed:35307651).

SLC22A6 Antibody (C-Term) Blocking Peptide - Protocols

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

Blocking Peptides

SLC22A6 Antibody (C-Term) Blocking Peptide - Images

SLC22A6 Antibody (C-Term) Blocking Peptide - Background

The protein is involved in the sodium-dependent transport and excretion of organic anions, some of which are potentially toxic. The encoded protein is an integral membrane protein and may be localized to the basolateral membrane.



SLC22A6 Antibody (C-Term) Blocking Peptide - References

Hong, M., et.al, J. Pharmacol. Exp. Ther. 332 (2), 650-658 (2010)Shin, H.J., et.al, Clin. Chim. Acta 411 (1-2), 99-105 (2010)