

SLC22A6 Antibody (C-Term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP9237B

Specification

SLC22A6 Antibody (C-Term) - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW	FC, IHC-P, WB,E <u>Q4U2R8</u> <u>NP_004781</u> Human Rabbit Polyclonal Rabbit IgG 61816
	513-541
Antigen Region	313-341

SLC22A6 Antibody (C-Term) - 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

This SLC22A6 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 513-541 amino acids from the C-terminal region of human SLC22A6.

Dilution FC~~1:10~50 IHC-P~~1:10~50 WB~~1:1000 E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

SLC22A6 Antibody (C-Term) is for research use only and not for use in diagnostic or therapeutic procedures.

SLC22A6 Antibody (C-Term) - Protein Information



Name SLC22A6 (<u>HGNC:10970</u>)

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:<u>11669456</u>, PubMed:<u>11907186</u>, PubMed:<u>14675047</u>, PubMed:<u>22108572</u>, PubMed:23832370, PubMed:28534121, PubMed:9950961). 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:<u>22108572</u>, PubMed:<u>23832370</u>). 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:<u>11669456</u>, PubMed:<u>14675047</u>). Uremic toxins include the indoxyl sulfate (IS), hippurate/N- benzoylglycine (HA), indole acetate (IA), 3-carboxy-4methyl-5-propyl- 2-furanpropionate (CMPF) and urate (PubMed:<u>14675047</u>, PubMed:<u>26377792</u>). Xenobiotics include the mycotoxin ochratoxin (OTA) (PubMed:<u>11669456</u>). 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:10049739, PubMed:10462545, PubMed:10964714, PubMed:9887087, PubMed:9950961) Expressed at lower level in liver, skeletal muscle, brain and placenta (PubMed:10049739, PubMed:10462545, PubMed:9887087, PubMed:9950961). 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) - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

SLC22A6 Antibody (C-Term) - Images





Anti-SLC22A6 Antibody (C-Term) at 1:1000 dilution + CCRF-CEM whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit lgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 62 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Formalin-fixed and paraffin-embedded human brain tissue reacted with SLC22A6 Antibody (C-Term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.





SLC22A6 Antibody (C-Term) (Cat. #AP9237b) flow cytometric analysis of CEM cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

SLC22A6 Antibody (C-Term) - 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) - 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)