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SLC22A3 Rabbit mAb

Catalog # AP78421

Product Information

Application	WB, IHC-P, FC
Primary Accession	O75751
Reactivity	Human
Host	Rabbit
Clonality	Monoclonal Antibody
Isotype	IgG
Conjugate	Unconjugated
Immunogen	A synthesized peptide derived from human SLC22A3
Purification	Affinity Purified
Calculated MW	61280

Additional Information

Gene ID	6581
Other Names	SLC22A3
Dilution	WB~~1/500-1/1000 IHC-P~~N/A FC~~1:10~50
Format	Liquid in 10mM PBS, pH 7.4, 150mM sodium chloride, 0.05% BSA, 0.02% sodium azide and 50% glycerol.
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

Protein Information

Name	SLC22A3 (HGNC:10967)
Function	Electrogenic voltage-dependent uniporter that mediates the transport of a variety of organic cations such as endogenous bioactive amines, cationic drugs and xenobiotics (PubMed:10196521, PubMed:10966924, PubMed:12538837, PubMed:17460754, PubMed:20858707). Cation cellular uptake or release is driven by the electrochemical potential, i.e. membrane potential and concentration gradient (PubMed:10966924). Functions as a Na(+)- and Cl(-)-independent, bidirectional uniporter (PubMed:12538837). Implicated in monoamine neurotransmitters uptake such as dopamine, adrenaline/epinephrine, noradrenaline/norepinephrine, histamine, serotonin and tyramine, thereby supporting a role in homeostatic regulation of aminergic neurotransmission in the brain (PubMed:10196521, PubMed:16581093, PubMed:20858707). Transports dopaminergic neuromodulators cyclo(his- pro) and salsolinol with low efficiency (PubMed:17460754). May be involved in the uptake and disposition of cationic

compounds by renal clearance from the blood flow (PubMed:10966924). May contribute to regulate the transport of cationic compounds in testis across the blood-testis-barrier (Probable). Mediates the transport of polyamine spermidine and putrescine (By similarity). Mediates the bidirectional transport of polyamine agmatine (PubMed:12538837). Also transports guanidine (PubMed:10966924). Mediates the transport of choline (PubMed:40972734). May mediate intracellular transport of organic cations due to its localization on endomembranes, thereby contributing to amine metabolism and intracellular signaling (By similarity).

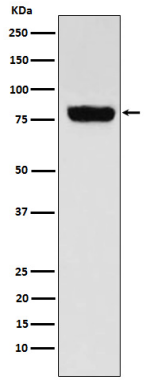
Cellular Location

Cell membrane; Multi-pass membrane protein. Apical cell membrane; Multi-pass membrane protein. Basolateral cell membrane; Multi-pass membrane protein. Mitochondrion membrane {ECO:0000250|UniProtKB:O88446}. Endomembrane system {ECO:0000250|UniProtKB:O88446}. Nucleus membrane {ECO:0000250|UniProtKB:O88446}. Nucleus outer membrane {ECO:0000250|UniProtKB:O88446}. Note=Localized to the apical/brush border membrane of enterocytes (PubMed:16263091). Localized to the luminal/apical membrane of ciliated epithelial cells in bronchi (PubMed:15817714). Localized to the basolateral membrane of intermediate cells in bronchi (PubMed:15817714). Localized to the entire plasma membrane of basal cells in bronchi (PubMed:15817714)

Tissue Location

Expressed in liver (PubMed:10196521, PubMed:9933568). Expressed in intestine (PubMed:16263091, PubMed:20858707). Expressed in kidney in proximal tubular cells (PubMed:10966924). Expressed in placenta (PubMed:10966924, PubMed:9933568). Expressed throughout the brain, including cerebral cortex, cerebrellum, substancia nigra, medulla oblongata, hippocampus, caudate nucleus, nucleus accumbens and pons with low levels of expression detected in nearly all brain regions (PubMed:10196521, PubMed:20858707). In testis, mostly localized to peritubular myoid cells and Leydig cells, and weakly expressed in developing germ cells (PubMed:35307651). Expressed in tracheal and bronchial epithelium of the respiratory tract, where it localizes to the apical membrane of ciliated cells, the entire membrane of basal cells and the basolateral membrane of intermediate cells (PubMed:15817714). Expressed in skeletal muscle, adrenal gland, heart, prostate, aorta, salivary gland, adrenal gland, uterus, lymph node, lung, trachea and spinal cord (PubMed:10196521, PubMed:20858707, PubMed:9933568). Expressed in fetal lung and liver (PubMed:9933568).

Images



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