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Slc22a3 antibody - middle region

Rabbit Polyclonal Antibody
Catalog # AI12364

Product Information

Application	WB
Primary Accession	Q9WTW5
Other Accession	NM_011395, NP_035525
Reactivity	Human, Mouse, Rat, Pig, Dog, Bovine
Predicted	Human, Mouse, Pig, Dog, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	61053

Additional Information

Gene ID	20519
Alias Symbol	EMT, Oct3, Orct3, Slca22a3
Other Names	Solute carrier family 22 member 3, Organic cation transporter 3, Slc22a3, Oct3
Format	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.
Reconstitution & Storage	Add 50 ul of distilled water. Final anti-Slc22a3 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.
Precautions	Slc22a3 antibody - middle region is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	Slc22a3 {ECO:0000312|MGI:MGI:1333817}
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:10966924, PubMed:18513366). 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 (By similarity). Implicated in monoamine neurotransmitters uptake such as dopamine, adrenaline/epinephrine, noradrenaline/norepinephrine, homovanillic acid, histamine, serotonin and tyramine, thereby supporting a role in homeostatic regulation of aminergic neurotransmission in the brain (PubMed:18513366,

PubMed:19416912). Transports dopaminergic neuromodulators cyclo(his-pro) and salsolinol with low efficiency (By similarity). 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 (By similarity). Mediates the transport of polyamine spermidine and putrescine (By similarity). Mediates the bidirectional transport of polyamine agmatine (By similarity). Also transports guanidine (PubMed:10966924). Mediates the transport of choline (By similarity). May mediate intracellular transport of organic cations due to its localization on endomembranes, thereby contributing to amine metabolism and intracellular signaling (PubMed:27659446).

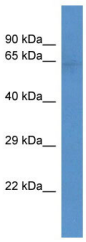
Cellular Location

Cell membrane; Multi-pass membrane protein. Apical cell membrane {ECO:0000250|UniProtKB:O75751}; Multi-pass membrane protein. Basolateral cell membrane {ECO:0000250|UniProtKB:O75751}; Multi-pass membrane protein. Mitochondrion membrane Endomembrane system. Nucleus membrane. Nucleus outer membrane {ECO:0000250|UniProtKB:O88446}. Note=Located to neuronal and glial endomembranes, including mitochondrial and nuclear membranes

Tissue Location

Highly expressed in placenta (PubMed:10966924, PubMed:9933568). Highly expressed in kidney cortex (PubMed:10966924) In kidney, expressed specifically in the proximal and distal convoluted tubules and within Bowman capsule (PubMed:10966924). Expressed in brain, particularly in dopaminergic neurons of the substantia nigra compacta, non-aminergic neurons of the ventral tegmental area, substantia nigra reticulata, locus coeruleus, hippocampus and cortex (PubMed:18513366). In brain, also detected in astrocytes in the substantia nigra reticulata, several hypothalamic nuclei and nigrostriatal region (PubMed:18513366, PubMed:19416912). Expressed in neurons and glial cells of amygdala (PubMed:27659446)

Images



WB Suggested Anti-Slc22a3 Antibody Titration: 1.0 µg/ml
Positive Control: Mouse Heart

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.