

SLC22A3 / OCT3 Antibody (aa275-324)
Rabbit Polyclonal Antibody
Catalog # ALS15804**Specification**

SLC22A3 / OCT3 Antibody (aa275-324) - Product Information

Application	WB
Primary Accession	O75751
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	61kDa KDa

SLC22A3 / OCT3 Antibody (aa275-324) - Additional Information**Gene ID** 6581**Other Names**

Solute carrier family 22 member 3, Extraneuronal monoamine transporter, EMT, Organic cation transporter 3, SLC22A3, EMTH, OCT3

Target/Specificity

SLC22A3 Antibody detects endogenous levels of total SLC22A3 protein.

Reconstitution & Storage

Store at -20°C for up to one year.

Precautions

SLC22A3 / OCT3 Antibody (aa275-324) is for research use only and not for use in diagnostic or therapeutic procedures.

SLC22A3 / OCT3 Antibody (aa275-324) - Protein Information**Name** SLC22A3 ([HGNC:10967](#))**Function**

Electrogenic voltage-dependent transporter 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). May also mediate intracellular transport of organic cations, thereby playing a role in 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, cerebellum, substantia 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).

Volume

50 µl

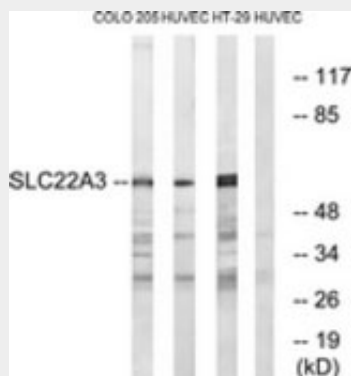
SLC22A3 / OCT3 Antibody (aa275-324) - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)

- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

SLC22A3 / OCT3 Antibody (aa275-324) - Images



Western blot of extracts from HUVEC/COLO/HT-29 cells, using SLC22A3 Antibody.

SLC22A3 / OCT3 Antibody (aa275-324) - Background

Mediates potential-dependent transport of a variety of organic cations. May play a significant role in the disposition of cationic neurotoxins and neurotransmitters in the brain.

SLC22A3 / OCT3 Antibody (aa275-324) - References

Gruendemann D.,et al.Nat. Neurosci. 1:349-351(1998).
Ota T.,et al.Nat. Genet. 36:40-45(2004).
Mungall A.J.,et al.Nature 425:805-811(2003).
Mural R.J.,et al.Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases.
Verhaagh S.,et al.Genomics 55:209-218(1999).