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SLC5A6 / SMVT Antibody (Internal)
Rabbit Polyclonal Antibody
Catalog # ALS11151

Specification

SLC5A6 / SMVT Antibody (Internal) - Product Information

Application	**IHC**
Primary Accession	Q9Y289
Reactivity	**Human, Monkey**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**69kDa KDa**

SLC5A6 / SMVT Antibody (Internal) - Additional Information

Gene ID 8884

Other Names
Sodium-dependent multivitamin transporter, Na(+)-dependent multivitamin transporter, Solute carrier family 5 member 6, SLC5A6, SMVT

Target/Specificity
Human SLC5A6. BLAST analysis of the peptide immunogen showed no homology with other human proteins.

Reconstitution & Storage
Long term: -70°C; Short term: +4°C

Precautions
SLC5A6 / SMVT Antibody (Internal) is for research use only and not for use in diagnostic or therapeutic procedures.

SLC5A6 / SMVT Antibody (Internal) - Protein Information

Name SLC5A6 (HGNC:11041)

Synonyms SMVT

Function
Sodium-dependent multivitamin transporter that mediates the electrogenic transport of pantothenate, biotin, lipoate and iodide (PubMed:10329687, PubMed:15561972, PubMed:19211916, PubMed:21570947, PubMed:20980265, PubMed:22015582, PubMed:25971966, PubMed:<a

href="http://www.uniprot.org/citations/25809983" target="_blank">25809983, PubMed:28052864, PubMed:27904971, PubMed:31754459). Functions as a Na(+)-coupled substrate symporter where the stoichiometry of Na(+):substrate is 2:1, creating an electrochemical Na(+) gradient used as driving force for substrate uptake (PubMed:10329687, PubMed:20980265). Required for biotin and pantothenate uptake in the intestine across the brush border membrane (PubMed:19211916). Plays a role in the maintenance of intestinal mucosa integrity, by providing the gut mucosa with biotin (By similarity). Contributes to the luminal uptake of biotin and pantothenate into the brain across the blood-brain barrier (PubMed:25809983).

Cellular Location
Cell membrane; Multi-pass membrane protein. Apical cell membrane; Multi-pass membrane protein. Note=Preferentially localized at the luminal membrane of brain capillary endothelium (PubMed:25809983). Localized to the brush border/apical membrane of intestine and renal polarized cells (PubMed:19211916).

Tissue Location
Expressed in microvessels of the brain (at protein level) (PubMed:25809983). Expressed in heart, brain, placenta, lung, liver, skeletal muscle, kidney, and pancreas (PubMed:10329687)

Volume
50 µl

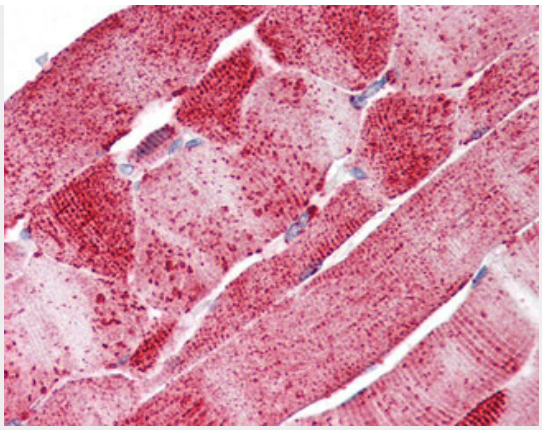
SLC5A6 / SMVT Antibody (Internal) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

SLC5A6 / SMVT Antibody (Internal) - Images

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Anti-SLC5A6 antibody ALS11151 IHC of human skeletal muscle.

SLC5A6 / SMVT Antibody (Internal) - Background

Transports pantothenate, biotin and lipoate in the presence of sodium.

SLC5A6 / SMVT Antibody (Internal) - References

Wang H.,et al.J. Biol. Chem. 274:14875-14883(1999).
Prasad P.D.,et al.Arch. Biochem. Biophys. 366:95-106(1999).
Ota T.,et al.Nat. Genet. 36:40-45(2004).
Hillier L.W.,et al.Nature 434:724-731(2005).
Mural R.J.,et al.Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases.