10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

SLC5A6 Rabbit pAb

SLC5A6 Rabbit pAb
Catalog # AP57777

Product Information

Application	IHC-P, IHC-F, IF, E
Primary Accession	Q9Y289
Predicted	Human, Mouse, Rat, Dog, Pig, Horse, Rabbit, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	68642
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human SLC5A6
Epitope Specificity	201-300/635
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Membrane.
SIMILARITY	Belongs to the sodium:solute symporter (SSF) (TC 2.A.21) family.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	SLC5A6 (Solute Carrier Family 5 (Sodium/Multivitamin And Iodide Cotransporter), Member 6) is a Protein Coding gene. Diseases associated with SLC5A6 include thiamine metabolism dysfunction syndrome 2 and urinary tract obstruction. Among its related pathways are Metabolism and Transport of glucose and other sugars, bile salts and organic acids, metal ions and amine compounds. GO annotations related to this gene include transporter activity and sodium-dependent multivitamin transmembrane transporter activity. An important paralog of this gene is SLC5A10.

Additional Information

Gene ID	8884
Other Names	Sodium-dependent multivitamin transporter, Na(+)-dependent multivitamin transporter, hSMVT, Solute carrier family 5 member 6, SLC5A6 (HGNC:11041), SMVT
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,ICC/IF=1:100-500,IF=1:100-500,ELISA=1:5000-10000
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

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:20980265, PubMed:21570947, PubMed:22015582, PubMed:25809983, PubMed:25971966, PubMed:27904971, PubMed:28052864, 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)

Background

SLC5A6 (Solute Carrier Family 5 (Sodium/Multivitamin And Iodide Cotransporter), Member 6) is a Protein Coding gene. Diseases associated with SLC5A6 include thiamine metabolism dysfunction syndrome 2 and urinary tract obstruction. Among its related pathways are Metabolism and Transport of glucose and other sugars, bile salts and organic acids, metal ions and amine compounds. GO annotations related to this gene include transporter activity and sodium-dependent multivitamin transmembrane transporter activity. An important paralog of this gene is SLC5A10.