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

SLC12A6 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP12382a

Product Information

Application	WB, IHC-P, E
Primary Accession	Q9UHW9
Other Accession	NP_598408.1, NP_005126.1
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB31331
Calculated MW	127617
Antigen Region	13-42

Additional Information

Gene ID	9990
Other Names	Solute carrier family 12 member 6, Electroneutral potassium-chloride cotransporter 3, K-Cl cotransporter 3, SLC12A6, KCC3
Target/Specificity	This SLC12A6 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 13-42 amino acids from the N-terminal region of human SLC12A6.
Dilution	WB~~1:1000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	SLC12A6 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	SLC12A6 (HGNC:10914)
Function	[Isoform 1]: Mediates electroneutral potassium-chloride cotransport when activated by cell swelling (PubMed:10600773, PubMed:11551954, PubMed:16048901, PubMed:18566107, PubMed:19665974,

PubMed:21628467, PubMed:27485015). May contribute to cell volume homeostasis in single cells (PubMed:16048901, PubMed:27485015).

Cellular Location

Cell membrane; Multi-pass membrane protein. Basolateral cell membrane {ECO:0000250|UniProtKB:Q924N4}; Multi-pass membrane protein {ECO:0000250|UniProtKB:Q924N4}

Tissue Location

Expressed in brain (at protein level) (PubMed:21628467). Highly expressed in heart, brain and kidney Detected at lower levels in skeletal muscle, placenta, lung and pancreas (PubMed:10600773). Detected in umbilical vein endothelial cells (PubMed:16048901). [Isoform 5]: Testis specific.

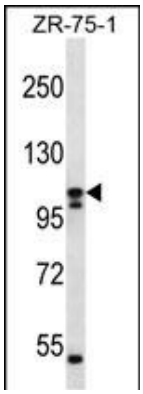
Background

This gene is a member of the K-Cl cotransporter (KCC) family. K-Cl cotransporters are integral membrane proteins that lower intracellular chloride concentrations below the electrochemical equilibrium potential. The proteins encoded by this gene are activated by cell swelling induced by hypotonic conditions. Alternate splicing results in multiple transcript variants encoding different isoforms. Mutations in this gene are associated with agenesis of the corpus callosum with peripheral neuropathy.

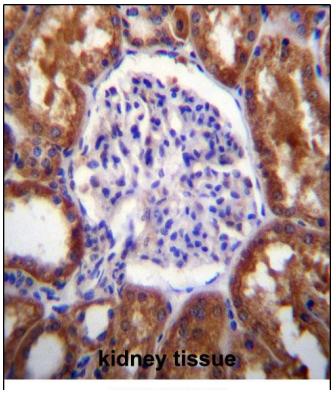
References

Rinehart, J., et al. Cell 138(3):525-536(2009)
Rudnik-Schoneborn, S., et al. Neuropediatrics 40(3):129-133(2009)
de Krom, M., et al. Biol. Psychiatry 65(7):625-630(2009)
Moser, D., et al. Neuropsychopharmacology 34(2):458-467(2009)
Salin-Cantegrel, A., et al. Hum. Mol. Genet. 17(17):2703-2711(2008)

Images



SLC12A6 Antibody (N-term) (Cat. #AP12382a) western blot analysis in ZR-75-1 cell line lysates (35ug/lane).This demonstrates the SLC12A6 antibody detected the SLC12A6 protein (arrow).



SLC12A6 Antibody (N-term) (Cat. #AP12382a)immunohistochemistry analysis in formalin fixed and paraffin embedded human kidney tissue followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of SLC12A6 Antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.

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