

Anti-SLC12A6 Antibody

Catalog # ABO11482

Specification

Anti-SLC12A6 Antibody - Product Information

Application WB
Primary Accession Q9UHW9
Host Rabbit

Reactivity Human, Mouse, Rat

Clonality Polyclonal Lyophilized

Description

Rabbit IgG polyclonal antibody for Solute carrier family 12 member 6(SLC12A6) detection. Tested with WB in Human; Mouse; Rat.

Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-SLC12A6 Antibody - Additional Information

Gene ID 9990

Other Names

Solute carrier family 12 member 6, Electroneutral potassium-chloride cotransporter 3, K-Cl cotransporter 3, SLC12A6, KCC3

Calculated MW 127617 MW KDa

Application Details

Western blot, 0.1-0.5 μg/ml, Human, Mouse, Rat

Subcellular Localization

Basolateral cell membrane; Multi-pass membrane protein.

Tissue Specificity

Highly expressed in heart, brain and kidney. Detected at lower levels in skeletal muscle, placenta, lung and pancreas. Detected in umbilical vein endothelial cells. Isoform 2 is more abundant in kidney. Isoform 5 is testis specific. Expressed in the proximal tubule of the kidney (at protein level).

Protein Name

Solute carrier family 12 member 6

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.

Immunogen

A synthetic peptide corresponding to a sequence at the C-terminus of human



SLC12A6(1060-1080aa QKAKSMEGFQDLLNMRPDQSN), different from the related mouse and rat sequences by one amino acid.

Purification

Immunogen affinity purified.

Cross Reactivity

No cross reactivity with other proteins

Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

Anti-SLC12A6 Antibody - Protein Information

Name SLC12A6 (<u>HGNC:10914</u>)

Function

[Isoform 1]: Mediates electroneutral potassium-chloride cotransport when activated by cell swelling (PubMed:16048901, PubMed:1551954, PubMed:10600773, PubMed:19665974, PubMed:18566107, 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.

Anti-SLC12A6 Antibody - Protocols

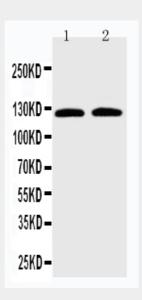
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety



Cell Culture

Anti-SLC12A6 Antibody - Images



Anti-SLC12A6 antibody, ABO11482, Western blottingLane 1: HELA Cell LysateLane 2: HUT102 Cell Lysate

Anti-SLC12A6 Antibody - Background

Solute carrier family 12(potassium/chloride transporters), member 6, also called SLC12A6 or KCC3, is a protein that in humans is encoded by the SLC12A6 gene. 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. By radiation hybrid and somatic cell hybrid analyses, this gene is mapped to 15q14. The proteins encoded by this gene are activated by cell swelling induced by hypotonic conditions. Mutations in this gene are associated with agenesis of the corpus callosum with peripheral neuropathy.