

Goat Anti-KCC3 / SLC12A6 Antibody
Peptide-affinity purified goat antibody
Catalog # AF1583a**Specification**

Goat Anti-KCC3 / SLC12A6 Antibody - Product Information

Application	WB, IHC
Primary Accession	O9UHW9
Other Accession	NP_598408 , 9990
Reactivity	Human
Host	Goat
Clonality	Polyclonal
Concentration	100ug/200ul
Isotype	IgG
Calculated MW	127617

Goat Anti-KCC3 / 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

Format

0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Goat Anti-KCC3 / SLC12A6 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-KCC3 / SLC12A6 Antibody - Protein Information**Name** SLC12A6 ([HGNC:10914](#))**Function**

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

target="_blank">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.

Goat Anti-KCC3 / SLC12A6 Antibody - Protocols

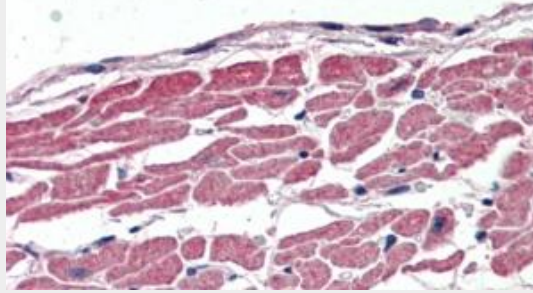
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Goat Anti-KCC3 / SLC12A6 Antibody - Images



AF1583a (0.1 µg/ml) staining of Human Heart lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.



AF1583a (2.5 µg/ml) staining of paraffin embedded Human Heart. Steamed antigen retrieval with citrate buffer pH 6, AP-staining.

Goat Anti-KCC3 / SLC12A6 Antibody - 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.

Goat Anti-KCC3 / SLC12A6 Antibody - References

Andermann syndrome can be a phenocopy of hereditary motor and sensory neuropathy--report of a discordant sibship with a compound heterozygous mutation of the KCC3 gene. Rudnik-Schneborn S, et al. Neuropediatrics, 2009 Jun. PMID 20020398.

Sites of regulated phosphorylation that control K-Cl cotransporter activity. Rinehart J, et al. Cell, 2009 Aug 7. PMID 19665974.

A common variant in DRD3 receptor is associated with autism spectrum disorder. de Krom M, et al. Biol Psychiatry, 2009 Apr 1. PMID 19058789.

HMSN/ACC truncation mutations disrupt brain-type creatine kinase-dependant activation of K⁺/Cl⁻ co-transporter 3. Salin-Cantegrel A, et al. Hum Mol Genet, 2008 Sep 1. PMID 18566107.

Functional analysis of a potassium-chloride co-transporter 3 (SLC12A6) promoter polymorphism leading to an additional DNA methylation site. Moser D, et al. Neuropsychopharmacology, 2009 Jan. PMID 18536702.