

SLC12A1 Antibody (monoclonal) (M03)

Mouse monoclonal antibody raised against a partial recombinant SLC12A1. Catalog # AT3901a

Specification

SLC12A1 Antibody (monoclonal) (M03) - Product Information

Application WB **Primary Accession** 013621 Other Accession NM 000338 Reactivity Human Host mouse Clonality **Monoclonal** Isotype IgG2a Kappa Calculated MW 121450

SLC12A1 Antibody (monoclonal) (M03) - Additional Information

Gene ID 6557

Other Names

Solute carrier family 12 member 1, Bumetanide-sensitive sodium-(potassium)-chloride cotransporter 2, Kidney-specific Na-K-Cl symporter, SLC12A1, NKCC2

Target/Specificity

SLC12A1 (NP_000329.1, 80 a.a. \sim 172 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.

Dilution

WB~~1:500~1000

Format

Clear, colorless solution in phosphate buffered saline, pH 7.2.

Storage

Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

Precautions

SLC12A1 Antibody (monoclonal) (M03) is for research use only and not for use in diagnostic or therapeutic procedures.

SLC12A1 Antibody (monoclonal) (M03) - Protocols

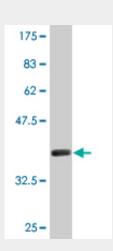
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot

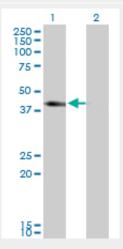


- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

SLC12A1 Antibody (monoclonal) (M03) - Images



Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (35.97 KDa).



Western Blot analysis of SLC12A1 expression in transfected 293T cell line by SLC12A1 monoclonal antibody (M03), clone 4H4.

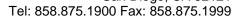
Lane 1: SLC12A1 transfected lysate(46.5 KDa).

Lane 2: Non-transfected lysate.

SLC12A1 Antibody (monoclonal) (M03) - Background

This gene encodes a kidney-specific sodium-potassium-chloride cotransporter that is expressed on the luminal membrane of renal epithelial cells of the thick ascending limb of Henle's loop and the macula densa. It plays a key role in concentrating urine and accounts for most of the NaCl resorption. It is sensitive to such diuretics as furosemide and bumetanide. Some Bartter-like syndromes result from defects in this gene. Alternative splicing results in multiple transcript variants encoding distinct isoforms. Additional splice variants have been described but their biological validity in humans has not been experimentally proven.







SLC12A1 Antibody (monoclonal) (M03) - References

Variation at the NFATC2 Locus Increases the Risk of Thiazolinedinedione-Induced Edema in the Diabetes REduction Assessment with ramipril and rosiglitazone Medication (DREAM) Study. Bailey SD, et al. Diabetes Care, 2010 Jul 13. PMID 20628086.L-type voltage-dependent calcium channel alpha subunit 1C is a novel candidate gene associated with secondary hyperparathyroidism: an application of haplotype-based analysis for multiple linked single nucleotide polymorphisms. Yokoyama K, et al. Nephron Clin Pract, 2010. PMID 20424473. Integrated genomic profiling identifies candidate genes implicated in glioma-genesis and a novel LEO1-SLC12A1 fusion gene. Bralten LB, et al. Genes Chromosomes Cancer, 2010 Jun. PMID 20196086. Gene-centric association signals for lipids and apolipoproteins identified via the HumanCVD BeadChip. Talmud PJ, et al. Am J Hum Genet, 2009 Nov. PMID 19913121.In vivo and in vitro splicing assay of SLC12A1 in an antenatal salt-losing tubulopathy patient with an intronic mutation. Nozu K, et al. Hum Genet, 2009 Oct. PMID 19513753.

SLC12A1 Antibody (monoclonal) (M03) - Citations

• Prostaglandin-E2 Mediated Increase in Calcium and Phosphate Excretion in a Mouse Model of Distal Nephron Salt Wasting.