

SLC12A1 Antibody (monoclonal) (M03)

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

Product Information

Application	WB
Primary Accession	<u>Q13621</u>
Other Accession	<u>NM_000338</u>
Reactivity	Human
Host	mouse
Clonality	monoclonal
Isotype	IgG2a Kappa
Clone Names	4H4
Calculated MW	121450

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. ~ 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.

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.

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.

Images



Citations

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

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