



S12A3 mouse mAb

Catalog No	YP-mAb-11318
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB
Gene Name	SLC12A3 TSC
Immunogen	Synthesized peptide derived from human S12A3 AA range: 947-997
Specificity	This antibody detects endogenous levels of S12A3 at Human/Mouse/Rat
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Monoclonal, Mouse,IgG
Purification	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-1:2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	S12A3;SLC12A3 TSC
Observed Band	
Calculated Molecular Weight	
Cell Pathway	Cell membrane ; Multi-pass membrane protein . Apical cell membrane ; Multi-pass membrane protein .
Tissue Specificity	Predominantly expressed in the kidney (at protein level) (PubMed:29993276, PubMed:8812482). Localizes to the distal convoluted tubules (at protein level) (PubMed:29993276). Not detected in normal aorta, but abundantly expressed in fatty streaks and advanced atherosclerotic lesions (at protein level) (PubMed:26099046).
Function	disease:Defects in SLC12A3 are the cause of Gitelman syndrome (GS) [MIM:263800]. GS is an autosomal recessive disorder characterized by hypokalemic alkalosis in combination with hypomagnesemia, low urinary calcium, and increased renin activity associated with normal blood pressure. Patients are often asymptomatic or present transient periods of muscular weakness and tetany, usually accompanied by abdominal pain, vomiting and fever. The phenotype is highly heterogeneous in terms of age at onset and severity. Cardinal features such as hypocalciuria and hypomagnesemia might



also change during the life cycle of a given patient. GS has overlapping features with Bartter syndrome.,function:Electrically silent transporter system. Mediates sodium and chloride reabsorption.,similarity:Belongs to the SLC12A transporter family.,tissue specificity:Predominant in kidney.,

Background

This gene encodes a renal thiazide-sensitive sodium-chloride cotransporter that is important for electrolyte homeostasis. This cotransporter mediates sodium and chloride reabsorption in the distal convoluted tubule. Mutations in this gene cause Gitelman syndrome, a disease similar to Bartter's syndrome, that is characterized by hypokalemic alkalosis combined with hypomagnesemia, low urinary calcium, and increased renin activity associated with normal blood pressure. This cotransporter is the target for thiazide diuretics that are used for treating high blood pressure. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008],

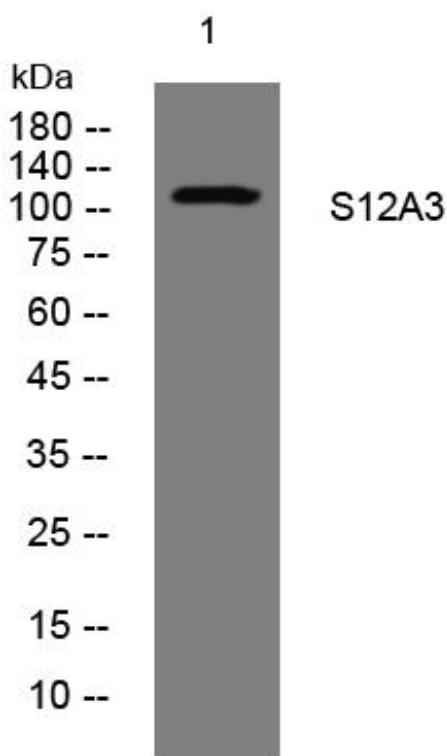
matters needing attention

Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images



Western Blot analysis of various cells using S12A3 mouse mAb