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Rabbit Anti-SLC12A1 antibody

SL19793R

Product Name:	SLC12A1
Chinese Name:	溶质载体家族蛋白12成员A1抗体
Alias:	BSC1; Bumetanide sensitive sodium 3; Bumetanide-sensitive sodium-(potassium)-chloride cotransporter 2; Kidney specific Na K Cl symporter; Kidney-specific Na-K-Cl symporter; MGC48843; Na K 2Cl cotransporter; NKCC2; potassiumchloride cotransporter 2; S12A1_HUMAN; Slc12a1; sodium potassium chloride cotransporter 2; solute carrier family 12 (sodium/potassium/chloride transporters); Solute carrier family 12 member 1.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Chicken,Dog,Pig,Cow,Horse,Rabbit,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500（Paraffin sections need antigen repair） not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	45kDa
Cellular localization:	The cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human SLC12A1:951-1050/1099<Cytoplasmic>
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	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.[provided by RefSeq, May 2010].

Function:
Electrically silent transporter system. Mediates sodium and chloride reabsorption. Plays a vital role in the regulation of ionic balance and cell volume.

Subcellular Location:
Membrane.

Tissue Specificity:
Kidney specific.

DISEASE:
Defects in SLC12A1 are the cause of Bartter syndrome type 1 (BS1) [MIM:601678]. BS refers to a group of autosomal recessive disorders characterized by impaired salt reabsorption in the thick ascending loop of Henle with pronounced salt wasting, hypokalemic metabolic alkalosis, and varying degrees of hypercalciuria. BS1 is a life-threatening condition beginning in utero, with marked fetal polyuria that leads to polyhydramnios and premature delivery. Another hallmark of BS1 is a marked hypercalciuria and, as a secondary consequence, the development of nephrocalcinosis and osteopenia.

Similarity:
Belongs to the SLC12A transporter family.

SWISS:
Q13621

Gene ID:
6557

Database links:

Entrez Gene: 478292 Dog

Entrez Gene: 6557 Human

Entrez Gene: 20495 Mouse

Entrez Gene: 100328575 Rabbit

	Entrez Gene: 25065 Rat Omim: 600839 Human SwissProt: Q13621 Human SwissProt: P55014 Mouse SwissProt: P55015 Rabbit SwissProt: P55016 Rat Unigene: 123116 Human Unigene: 605373 Human Unigene: 3914 Mouse Unigene: 3214 Rabbit Unigene: 14799 Rat **Important Note:** This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.