

Anti-SLC12A1 Picoband Antibody

Catalog # ABO12083

Product Information

Application	WB, IHC-P
Primary Accession	Q13621
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Solute carrier family 12 member 1 (SLC12A1) detection. Tested with WB, IHC-P in Human;Mouse;Rat.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

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
Calculated MW	121450
Application Details	Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, Mouse, Rat, By Heat Western blot, 0.1-0.5 µg/ml, Human, Mouse
Subcellular Localization	Membrane; Multi-pass membrane protein.
Tissue Specificity	Kidney specific.
Source	Eukaryota
Protein Name	Solute carrier family 12 member 1
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg NaN ₃ .
Immunogen	A synthetic peptide corresponding to a sequence at the N-terminus of human SLC12A1(52-83aa DEAQKRLRISFRPGNQECYDNFLQSGETAKTD), different from the related mouse sequence by two amino acids, and from the related rat sequence by four amino acids.
Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins.

Storage At -20 °C for one year. After reconstitution, at 4 °C for one month. It can also be aliquotted and stored frozen at -20 °C for a longer time. Avoid repeated freezing and thawing.

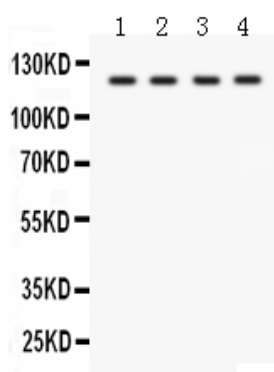
Protein Information

Name	SLC12A1 (HGNC:10910)
Function	Renal sodium, potassium and chloride non-electrogenic ion symporter that mediates the transepithelial NaCl reabsorption in the thick ascending limb and plays an essential role in the urinary concentration and volume regulation (PubMed: 21321328). It can substitute NH ₄ (+) for K(+), enabling NH ₄ (+) apical transmembrane transport in the medullary thick ascending limb (MTAL). This function is crucial for maintaining ammonium homeostasis by the kidney, particularly during metabolic acidosis (By similarity).
Cellular Location	Apical cell membrane; Multi-pass membrane protein
Tissue Location	Kidney; localizes to the thick ascending limbs (at protein level).

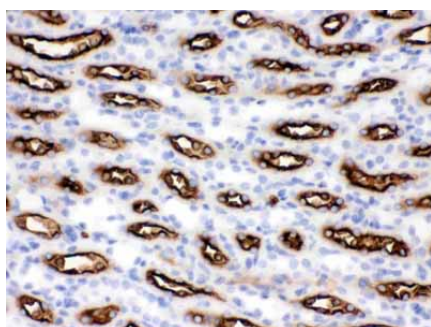
Background

Solute carrier family 12 (sodium/potassium/chloride transporters), member 1, also called NKCC2 is specifically found in cells of the thick ascending limb of the loop of Henle in nephrons, the basic functional units of the kidney. This gene is mapped to 15q21.1. 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. This gene plays a vital role in the regulation of ionic balance and cell volume.

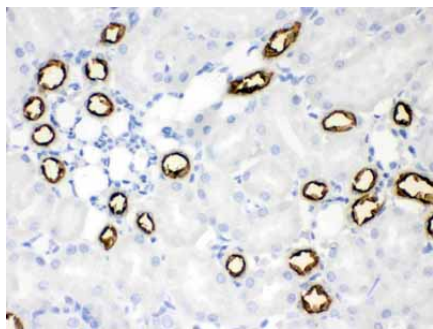
Images



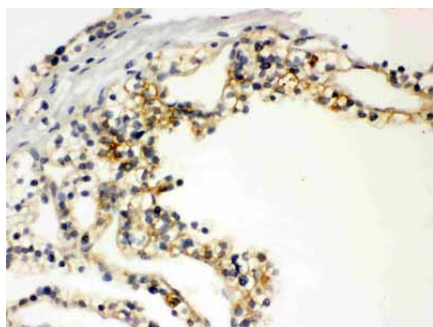
Anti- SLC12A1 Picoband antibody, ABO12083, Western blotting
All lanes: Anti SLC12A1 (ABO12083) at 0.5ug/ml
Lane 1: HELA Whole Cell Lysate at 40ug
Lane 2: JURKAT Whole Cell Lysate at 40ug
Lane 3: SKOV Whole Cell Lysate at 40ug
Lane 4: Mouse Kidney Tissue Lysate at 50ug
Predicted bind size: 121KD
Observed bind size: 121KD



Anti- SLC12A1 Picoband antibody, ABO12083,
IHC(P)
IHC(P): Mouse Kidney Tissue



Anti- SLC12A1 Picoband antibody, ABO12083,
IHC(P)IHC(P): Rat Kidney Tissue



Anti- SLC12A1 Picoband antibody, ABO12083,
IHC(P)IHC(P): Human Kidney Cancer Tissue

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