

Anti-SLC12A1 Antibody
Catalog # ABO11480**Specification**

Anti-SLC12A1 Antibody - Product Information

Application	WB, IHC-P, IHC-F
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, IHC-F in Human;Mouse;Rat.

Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-SLC12A1 Antibody - 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 MW KDa

Application Details

Immunohistochemistry(Frozen Section), 0.5-1 µg/ml, Rat, Human, Mouse
Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Rat, Human, Mouse, By Heat
Western blot, 0.1-0.5 µg/ml, Rat, Human, Mouse

Subcellular Localization

Membrane; Multi-pass membrane protein.

Tissue Specificity

Kidney specific.

Protein Name

Solute carrier family 12 member 1

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg Thimerosal, 0.05mg NaN₃.

Immunogen

A synthetic peptide corresponding to a sequence at the N-terminus of human SLC12A1(125-139aa KVNRPSSLLEIHEQLA), identical to the related mouse sequence, different from the related rat

sequence by one amino acid.

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.

Anti-SLC12A1 Antibody - Protein Information

Name SLC12A1

Synonyms NKCC2 {ECO:0000303|PubMed:8640224}

Function

Renal sodium, potassium and chloride ion cotransporter that mediates the transepithelial NaCl reabsorption in the thick ascending limb and plays an essential role in the urinary concentration and volume regulation (PubMed: <http://www.uniprot.org/citations/21321328> target="_blank">21321328). Electrically silent transporter system (By similarity).

Cellular Location

Apical cell membrane; Multi-pass membrane protein

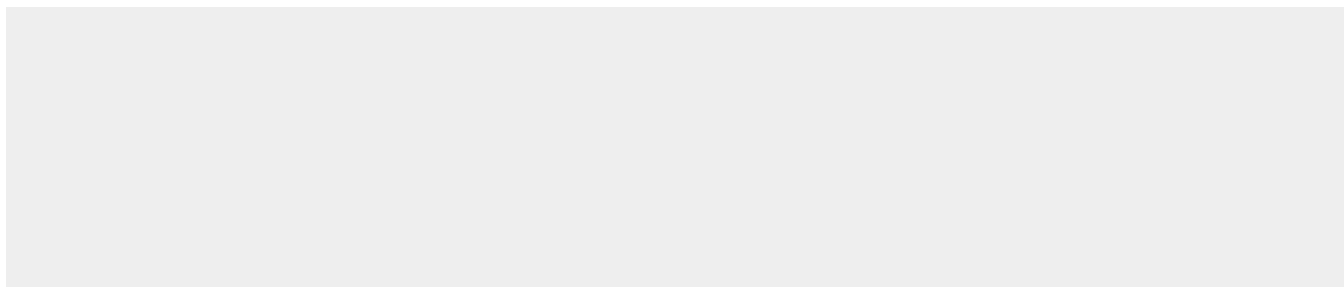
Tissue Location

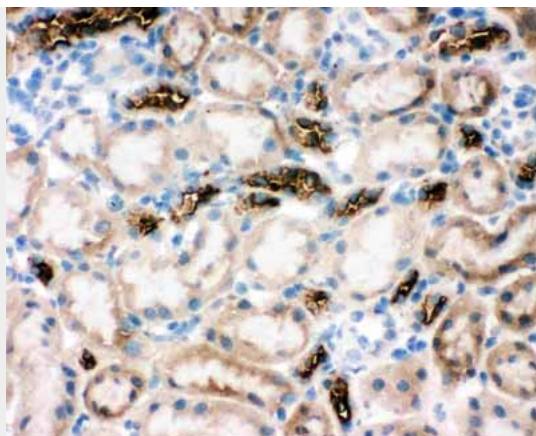
Kidney; localizes to the thick ascending limbs (at protein level).

Anti-SLC12A1 Antibody - Protocols

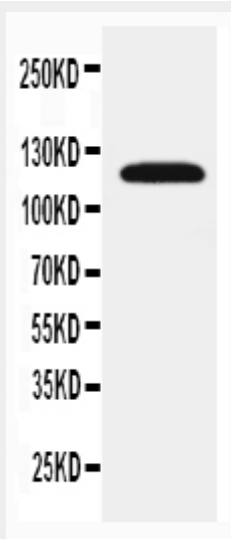
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

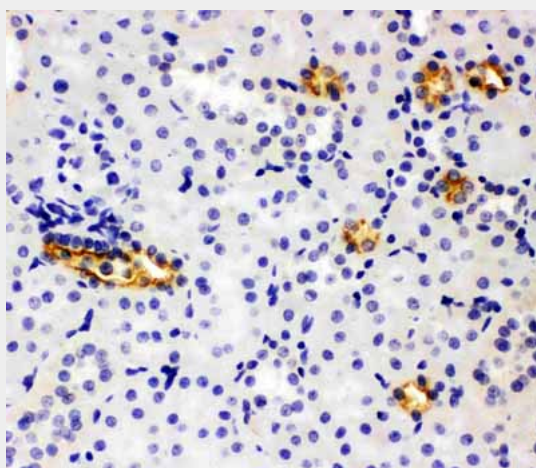
Anti-SLC12A1 Antibody - Images



Anti-SLC12A1 antibody, ABO11480, IHC(F)IHC(F): Rat Kidney Tissue



Anti-SLC12A1 antibody, ABO11480, Western blottingWB: Rat Kidney Tissue Lysate



Anti-SLC12A1 antibody, ABO11480, IHC(P)IHC(P): Rat Kidney Tissue

Anti-SLC12A1 Antibody - 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.