10320 Camino Santa Fe, Suite G
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Tel: 858.875.1900 Fax: 858.875.1999

Anti-SLC12A1 Picoband Antibody

Catalog # ABO12083

Specification

Anti-SLC12A1 Picoband Antibody - 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.

Anti-SLC12A1 Picoband 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(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.

Protein Name
Solute carrier family 12 member 1

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

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 r˚Constitution, 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 Picoband 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: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 Picoband 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 Cytomety
- Cell Culture

Anti-SLC12A1 Picoband Antibody - Images

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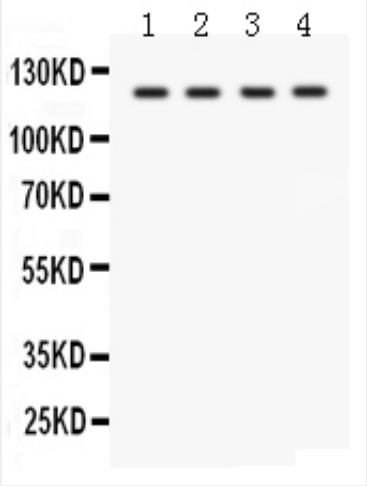
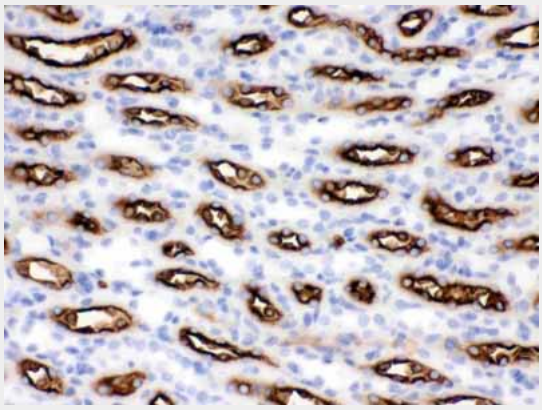
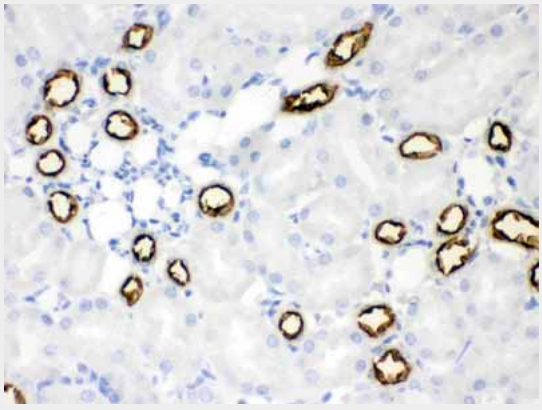


Anti- SLC12A1 Picoband antibody, ABO12083, Western blottingAll lanes: Anti SLC12A1 (ABO12083) at 0.5ug/mlLane 1: HELA Whole Cell Lysate at 40ugLane 2: JURKAT Whole Cell Lysate at 40ugLane 3: SKOV Whole Cell Lysate at 40ugLane 4: Mouse Kidney Tissue Lysate at 50ugPredicted bind size: 121KDObserved bind 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

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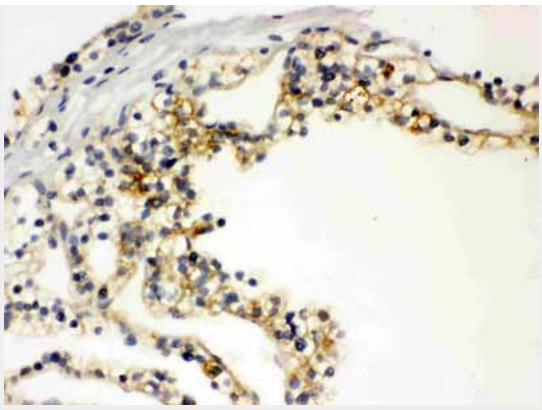

Anti- SLC12A1 Picoband antibody, ABO12083, IHC(P)IHC(P): Human Kidney Cancer Tissue

Anti-SLC12A1 Picoband 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.