

# **Anti-SLC12A1 Antibody**

Catalog # ABO11480

## **Specification**

## **Anti-SLC12A1 Antibody - Product Information**

Application IHC, WB
Primary Accession O13621
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

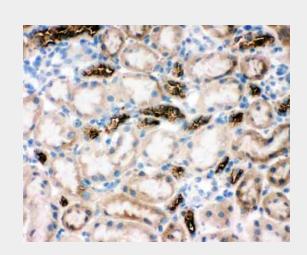
#### **Application Details**

Immunohistochemistry(Frozen Section), 0.5-1  $\mu$ g/ml, Rat, Human, Mouse<br/>br>Immu nohistochemistry(Paraffin-embedded Section), 0.5-1  $\mu$ g/ml, Rat, Human, Mouse, By Heat<br/>br>Western blot, 0.1-0.5  $\mu$ g/ml, Rat, Human, Mouse<br/>br>

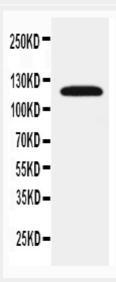
#### Subcellular Localization

Membrane; Multi-pass membrane protein.

# **Tissue Specificity** Kidney specific.



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



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



## **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 KVNRPSLLEIHEQLA), 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 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 Antibody - Protein Information**

## Name SLC12A1

# **Synonyms** NKCC2

# Function

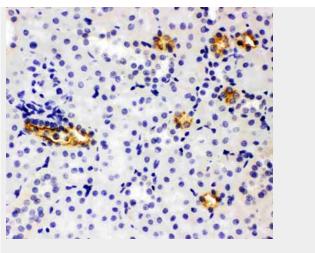
Renal sodium, potassium and chloride ion cotransporter that mediates the transepithelial NaCl reabsorption in the thick ascending limb and plays an essential role in the urinary concentration and volume regulation. Electrically silent transporter system.

#### **Cellular Location**

Apical cell membrane {ECO:0000250|UniProtKB:P55014}; Multi-pass membrane protein

# **Tissue Location**

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

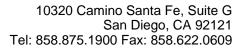


Anti-SLC12A1 antibody, ABO11480, IHC(P)IHC(P): Rat Kidney Tissue

# **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 15g21.1. 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.





# **Anti-SLC12A1 Antibody - Protocols**

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- Cell Culture