

Rabbit anti-Human, Rat NKCC1/SLC12A2 Polyclonal Antibody | anti-SLC12A2 antibody

Anti-NKCC1/SLC12A2 Antibody Picoband

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA126322	Rabbit	Human, Rat	Western Blot, Immunohistochemistry, Flow Cytometry, Functional Assay, ELISA

PRODUCT SYNONYMS

NKCC1/SLC12A2; Polyclonal Antibody; Anti-NKCC1/SLC12A2 Antibody Picoband; anti-SLC12A2 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Rat
Clonality	Polyclonal
Isotype	Rabbit IgG
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na ₂ HPO ₄ .
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml. (varies by lot)
Applicable Applications for anti-SLC12A2 antibody	WB (Western Blot), IHC (Immunohistochemistry), FCM/FACS (Flow Cytometry), ELISA
Reconstitution	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Immunogen	E Coli-derived human NKCC1/SLC12A2 recombinant protein (Position: K889-K943).
Preparation and Storage	Store at -20 degree C for one year from date of receipt. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for six months. Avoid repeated freezing and thawing.

IMAGES



FCM/FACS (Flow Cytometry)

Figure 5. Flow Cytometry analysis of K562 cells using anti-NKCC1/SLC12A2 antibody (AAA126322). Overlay histogram showing K562 cells stained with AAA126322 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-NKCC1/SLC12A2 Antibody (AAA126322, 1 ug/1x10⁶ cells) for 30 min at 20 degree C. DyLight488 conjugated goat anti-rabbit IgG was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1 ug/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



IHC (Immunohistochemistry)

Figure 4. IHC analysis of NKCC1/SLC12A2 using anti-NKCC1/SLC12A2 antibody (AAA126322). NKCC1/SLC12A2 was detected in a paraffin-embedded section of rat intestine tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-NKCC1/SLC12A2 Antibody (AAA126322) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.



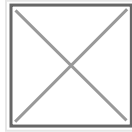
IHC (Immunohistochemisry)

Figure 3. IHC analysis of NKCC1/SLC12A2 using anti-NKCC1/SLC12A2 antibody (AAA126322).NKCC1/SLC12A2 was detected in a paraffin-embedded section of human rectal cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-NKCC1/SLC12A2 Antibody (AAA126322) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.



IHC (Immunohiostchemistry)

Figure 2. IHC analysis of NKCC1/SLC12A2 using anti-NKCC1/SLC12A2 antibody (AAA126322).NKCC1/SLC12A2 was detected in a paraffin-embedded section of human colon cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-NKCC1/SLC12A2 Antibody (AAA126322) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.



WB (Western Blot)

Figure 1. Western blot analysis of NKCC1/SLC12A2 using anti-NKCC1/SLC12A2 antibody (AAA126322).Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel)/90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.Lane 1: human Caco-2 whole cell lysates.After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-NKCC1/SLC12A2 antigen affinity purified polyclonal antibody (#AAA126322) at 0.5 ug/mL overnight at 4 degree C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for NKCC1/SLC12A2 at approximately 180 kDa. The expected band size for NKCC1/SLC12A2 is at 180 kDa.

ADDITIONAL INFORMATION

Related Product Information for anti-SLC12A2 antibody	Solute carrier family 12(sodium/potassium/chloride transporters), member 2, also known as NKCC1, is widely distributed throughout the body, especially in organs that secrete fluids, called exocrine glands. By fluorescence in situ hybridization, this gene is mapped to chromosome 5q23.3. The protein encoded by this gene mediates sodium and chloride transport and reabsorption. The encoded protein is a membrane protein and is important in maintaining proper ionic balance and cell volume. This protein is phosphorylated in response to DNA damage. Three transcript variants encoding two different isoforms have been found for this gene.
Product Categories/Family for anti-SLC12A2 antibody	Primary Antibodies , Rabbit Polyclonal Antibodies

NCBI AND UNIPROT INFORMATION

NCBI GI #	1709292
NCBI GeneID	6558
UniProt Accession #	P55011 ; Q8N713 ; Q8WWH7
Molecular Weight	1212
NCBI Official Full Name	Solute carrier family 12 member 2
NCBI Official Synonym Full Names	solute carrier family 12 (sodium/potassium/chloride transporter), member 2
NCBI Official Symbol	SLC12A2
NCBI Official Synonym Symbols	BSC; BSC2; NKCC1; PPP1R141
NCBI Protein Information	solute carrier family 12 member 2; basolateral Na-K-Cl symporter; protein phosphatase 1, regulatory subunit 141; bumetanide-sensitive sodium-(potassium)-chloride cotransporter 1; solute carrier family 12 (sodium/potassium/chloride transporters), member 2

UniProt Protein Name	Solute carrier family 12 member 2
UniProt Gene Name	SLC12A2
UniProt Synonym Gene Names	NKCC1
UniProt Entry Name	S12A2_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/nkcc1-slc12a2-antibody-western-blot-immunohistochemistry-flow-cytometry-elisa/126322>