For Research Use Only

NKCC1/SLC12A2 Recombinant antibody, PBS Only

Catalog Number:86201-1-PBS



Basic Information

Catalog Number: 86201-1-PBS Concentration: 1 mg/ml

Source: Rabbit Isotype: IgG

Immunogen Catalog Number:

AG4991

GenBank Accession Number:

BC033003 GeneID (NCBI): 6558 UNIPROT ID:

solute carrier family 12 (sodium/potassium/chloride transporters), member 2

Calculated MW: 131 kDa Observed MW: 150-160 kDa

P55011

Full Name:

Purification Method: Protein A purification

CloneNo.: 250829D8

Applications

Tested Applications: WB, IHC, Indirect ELISA Species Specificity: human, mouse

Background Information

The Na-K-Cl cotransporter sodium-potassium-chloride cotransporter 1 (NKCC1), encoded by the SLC12A2 gene, is an intensively studied member of the CCC family. NKCC1 is a membrane protein and plays fundamental roles in regulating trans-epithelial ion movement, cell volume, chloride homeostasis and neuronal excitability. NKCC1 assembles into a dimer, with the first ten transmembrane (TM) helices harboring the transport core and TM11-TM12 helices lining the dimer interface(PMID: 32081947). The observed molecular weight of NKCC1 is about 140 kDa, glycosylated NKCC1 is detected a band at 170 kDa (PMID: 22723696).

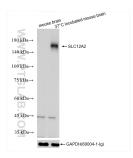
Storage

Storage:

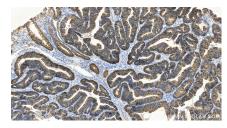
Store at -80°C.
The product is shipped with ice packs. Upon receipt, store it immediately at -80°C

Storage Buffer: PBS only, pH7.3

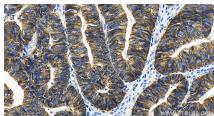
Selected Validation Data



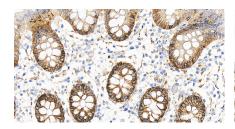
Various lysates were subjected to SDS PAGE followed by western blot with 86201-1-RR (NKCC1/SLC12A2 antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 86201-1-PBS in a different storage buffer formulation.



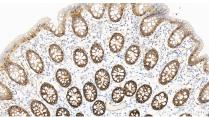
Immunohistochemical analysis of paraffinembedded human colon cancer tissue slide using 86201-1-RR (NKCC1/SLC12A2 antibody) at dilution of 1:500 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 86201-1-PBS in a different storage buffer formulation.



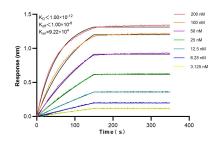
Immunohistochemical analysis of paraffinembedded human colon cancer tissue slide using 86201-1-RR (NKC C 1/SLC 12A2 antibody) at dilution of 1:500 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 86201-1-PBS in a different storage buffer formulation.



Immunohistochemical analysis of paraffinembedded human colon tissue slide using 86201-1-RR (NKCC1/SLC12A2 antibody) at dilution of 1:500 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 86201-1-PBS in a different storage buffer formulation.



Immunohistochemical analysis of paraffinembedded human colon tissue slide using 86201-1-RR (NKCC1/SLC12A2 antibody) at dilution of 1:500 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 86201-1-PBS in a different storage buffer formulation.



Biolayer interferometry (BLI) kinetic assays of 86201-1-RR against Human NKCC1/SLC12A2 were performed. The affinity constant is below 1 pM.