For Research Use Only

NKCC1/SLC12A2 Recombinant antibody, PBS Only

Catalog Number:86201-1-PBS



Basic Information

Catalog Number: 86201-1-PBS

GenBank Accession Number:

BC033003

GeneID (NCBI):

100ug, Concentration: 1 mg/ml by Nanodrop: **UNIPROT ID:** Source: P55011 Rabbit Full Name:

Isotype: solute carrier family 12 (sodium/potassium/chloride IgG transporters), member 2 Immunogen Catalog Number:

Calculated MW: AG4991

> 131 kDa Observed MW: 150-160 kDa

Purification Method:

Protein A purification CloneNo.: 250829D8

Applications

Tested Applications:

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

Background Information

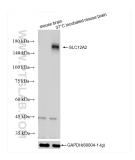
 $The Na-K-Cl\ cotransporter\ sodium-potassium-chloride\ cotransporter\ 1\ (NKCC1),\ encoded\ by\ the\ SLC12A2\ gene,\ is\ an$ intensively studied member of the CCC family. NKCC1 is a membrane protein and plays fundamental roles in regulating trans-epithelial ion movement, cell volume, chloride homeostasis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

Storage

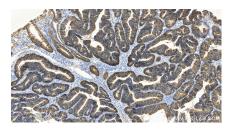
Storage: Store at -80°C. Storage Buffer: PBS only, pH7.3

in USA), or 1(312) 455-8498 (outside USA)

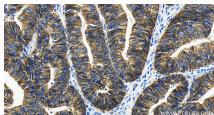
Selected Validation Data



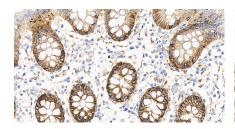
Various lysates were subjected to SDS PAGE followed by western blot with 86201-1-RR (NKCC 1/SLC 12A2 antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 86201-1-PBS in a different storage buffer formulation.



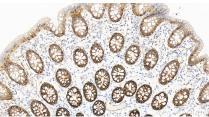
Immunohistochemical analysis of paraffinembedded human colon cancer tissue slide using 86201-1-RR (NKCC1/SLC12A2 antibody) at dilution of 1:500 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 86201-1-PBS in a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



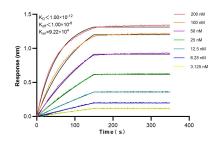
Immunohistochemical analysis of paraffinembedded human colon cancer tissue slide using 86201-1-RR (NKC C1/SLC 12A2 antibody) at dilution of 1:500 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 86201-1-PBS in 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.