For Research Use Only

NKCC1/SLC12A2 Recombinant antibody

Catalog Number:86201-1-RR



Basic Information

Catalog Number: GenBank Accession Number:

86201-1-RR BC033003 GeneID (NCBI): 100ul , Concentration: 1000 $\mu g/ml$ by 6558

Nanodrop: **UNIPROT ID:** 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

Recommended Dilutions: WB: 1:1000-1:4000 IHC: 1:250-1:1000

Applications

Tested Applications:

WB, IHC, ELISA

Species Specificity: human, mouse

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate

buffer pH 6.0

Positive Controls:

WB: 37°C incubated mouse brain tissue,

IHC: human colon cancer tissue, human colon tissue

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

Store at -20°C. Stable for one year after shipment.

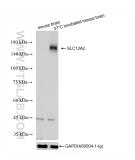
Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

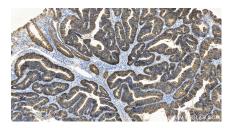
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

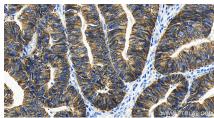
Selected Validation Data



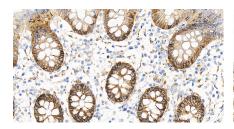
Various lysates were subjected to SDS PAGE followed by western blot with 86201-1-RR (NKCC1/SLC12A2 antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



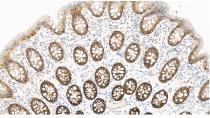
Immunohistochemical analysis of paraffinembedded human colon cancer tissue slide using 86201-1-RR (NKCC1/SLC12A2 antibody) at dilution of 1:500 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



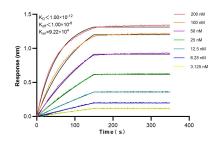
Immunohistochemical analysis of paraffinembedded human colon cancer tissue slide using 86201-1-RR (NKCC1/SLC12A2 antibody) at dilution of 1:500 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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).



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).



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