

For Research Use Only

NKCC1/SLC12A2 Recombinant antibody

Catalog Number: 86201-1-RR



Basic Information

Catalog Number:

86201-1-RR

Concentration:

1000 µg/ml

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG4991

GenBank Accession Number:

BC033003

GeneID (NCBI):

6558

UNIPROT ID:

P55011

Full Name:

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

Calculated MW:

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

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

For technical support and original validation data for this product please contact:

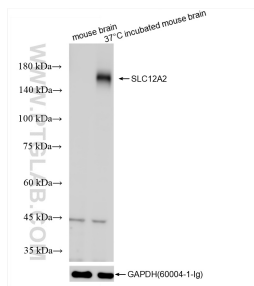
T: 4006900926

E: Proteintech-CN@ptglab.com

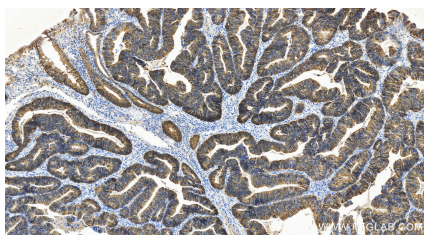
W: ptgcn.com

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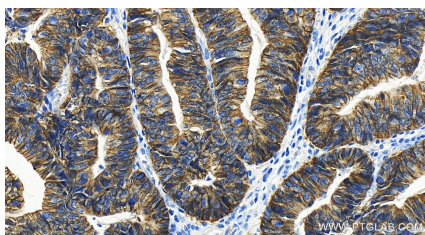
Selected Validation Data



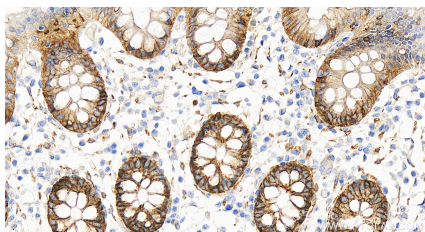
Various lysates were subjected to SDS PAGE followed by western blot with 86201-1-RR (NKCC1/SLC12A2 antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



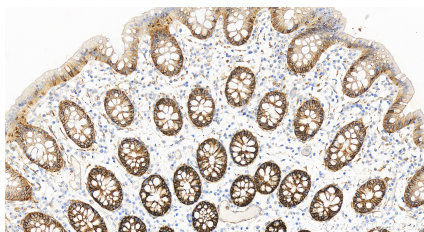
Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using 86201-1-RR (NKCC1/SLC12A2 antibody) at dilution of 1:500 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



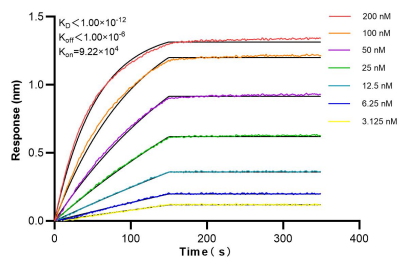
Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using 86201-1-RR (NKCC1/SLC12A2 antibody) at dilution of 1:500 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded 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 paraffin-embedded 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.