

For Research Use Only

NKCC1/SLC12A2 Polyclonal antibody

Catalog Number: 13884-1-AP

Featured Product

28 Publications



Basic Information

Catalog Number:

13884-1-AP

Concentration:

700 ug/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:

Antigen affinity purification

Recommended Dilutions:

WB 1:1000-1:4000

IHC 1:50-1:500

Applications

Tested Applications:

WB, IHC, ELISA

Cited Applications:

WB, IHC, IF, IP

Species Specificity:

human, mouse, rat

Cited Species:

human, mouse, rat, pig

Positive Controls:

WB : mouse brain tissue, 37°C incubated mouse brain tissue

IHC : human colon cancer tissue,

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

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).

Notable Publications

| Author | Pubmed ID | Journal | Application |
|--------------------|-----------|--------------|-------------|
| Bo Yang | 26389591 | PLoS One | WB |
| Michelle W Antoine | 24009395 | Science | WB, IHC |
| Jie Zhu | 34626749 | Neuroscience | WB |

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:

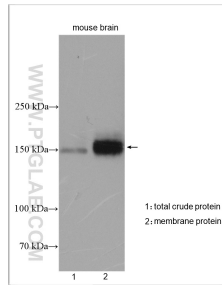
T: 4006900926

E: Proteintech-CN@ptglab.com

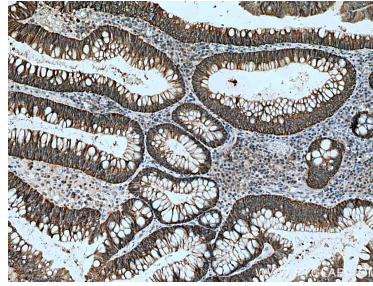
W: ptgcn.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

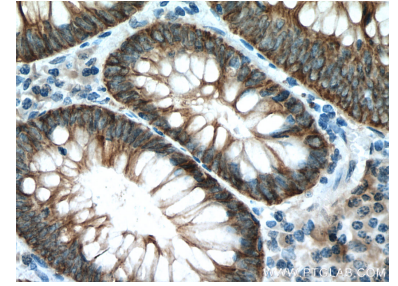
Selected Validation Data



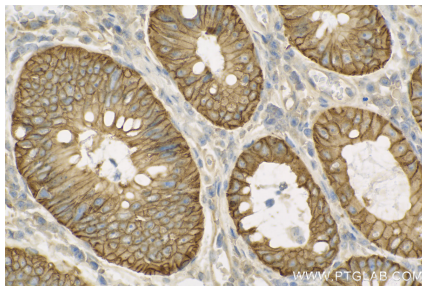
Mouse brain total extract lysate and 37°C incubated mouse brain membrane extract lysate were subjected to SDS PAGE followed by western blot with 13884-1-AP (NKCC1/SLC12A2 antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using 13884-1-AP (NKCC1 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using 13884-1-AP (NKCC1/SLC12A2 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded Colorectal cancer slide using 13884-1-AP (NKCC1/SLC12A2 antibody) at dilution of 1:400 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).