For Research Use Only

NKCC1/SLC12A2 Polyclonal antibody

Isotype:

Catalog Number: 28055-1-AP



Basic Information

Catalog Number: GenBank Accession Number: 28055-1-AP BC033003

Concentration: GeneID (NCBI): 6558

Source: UNIPROT ID: Rabbit P55011

IgG solute carrier family 12
Immunogen Catalog Number: (sodium/potassium/chloride
AG27895 solute carrier family 12
(sodium/potassium/chloride
transporters), member 2

Full Name:

Calculated MW: 131 kDa Observed MW: 150-160 kDa Purification Method: Antigen affinity purification Recommended Dilutions: WB 1:2000-1:10000 IHC 1:300-1:1200

IF/ICC 1:50-1:500

Applications

Tested Applications: WB, IHC, IF/ICC, ELISA Species Specificity: human

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: unboiled HeLa cells,

IHC : human breast cancer tissue, human colon cancer

tissue, human prostate cancer tissue

IF/ICC : HeLa cells, A549 cells

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

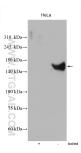
Storage:

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

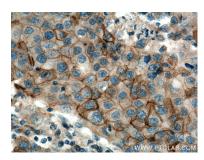
Selected Validation Data



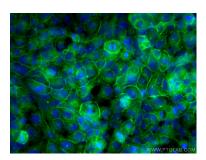
Boiled and unboiled HeLa cell lysates were subjected to SDS PAGE followed by western blot with 28055-1-AP (NKCC1/SLC12A2 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffinembedded human breast cancer tissue slide using 28055-1-AP (NKCC 1/SLC 12A2 antibody) at dilution of 1:600 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffinembedded human breast cancer tissue slide using 28055-1-AP (NKCC 1/SLC 12A2 antibody) at dilution of 1:600 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (-20°C Methanol) fixed Hela cells using NKCC1/SLC12A2 antibody (28055-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



Immunohistochemical analysis of paraffinembedded colon cancer slide using 28055-1-AP (NKCC1/SLC12A2 antibody) at dilution of 1:1000 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).