For Research Use Only

NKCC1,SLC12A2 Polyclonal antibody

Catalog Number: 28055-1-AP



Basic Information

Catalog Number: GenBank Accession Number: 28055-1-AP BC033003 GeneID (NCBI): Size: 1000 µg/ml 6558 **UNIPROT ID:** Source:

Rabbit P55011 Full Name: Isotype:

Immunogen Catalog Number:

AG27895

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

Calculated MW: 131 kDa 150-160 kDa

Purification Method:

IHC 1:300-1:1200

IF 1:50-1:500

Antigen affinity purification Recommended Dilutions: WB 1:2000-1:10000

Observed MW:

Applications

Tested Applications: IF/ICC, IHC, WB, 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 prostate

cancer tissue IF: HeLa 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).

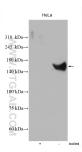
Storage

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

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

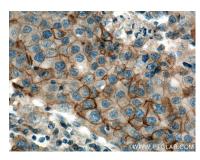
Selected Validation Data



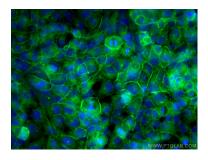
Boiled and unboiled HeLa cell lysates were subjected to SDS PAGE followed by western blot with 28055-1-AP (SLC 12A2 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffinembedded human breast cancer tissue slide using 28055-1-AP (SLC12A2 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 (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).