



Rabbit Anti-NKCC1/SLC12A2 antibody

SL6945R

Product Name:	NKCC1/SLC12A2
Chinese Name:	钠钾离子Transporter1抗体
Alias:	Basolateral Na-K-Cl symporter; BSC; BSC2; Bumetanide-sensitive sodium-(potassium)-chloride cotransporter 1; mBSC2; NKCC1; S12A2_HUMAN; SLC12A2; sodium-potassium-chloride cotransporter 1; solute carrier family 12 (sodium/potassium/chloride transporters) member 2; Solute carrier family 12 member 2; sy-ns.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Chicken,Dog,Pig,Cow,Chimpanzee,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800Flow-Cyt=3ug/testICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	132kDa
Cellular localization:	The cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human NKCC1:701-800/1212<Extracellular>
Isotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	Na-K-Cl cotransporters (NKCC) are channel proteins that aid in the transcellular movement of chloride across both secretory and absorptive epithelia. NKCC1 is

expressed in muscle cells, neurons, and red blood cells. In the basolateral membrane of secretory epithelia, NKCC1 mediates active chloride secretion. The gene encoding human NKCC1 maps to chromosome 5q23.3. In mice, disruption of the NKCC1 gene leads to deafness and impaired balance. NKCC2 is specifically expressed in the kidney where it mediates active reabsorption of sodium chloride in the thick ascending limb of the loop of Henle. NKCC2 is sensitive to the clinically important diuretics furosemide and bumetanide. The gene encoding human NKCC2 maps to chromosome 15q15-q21 and mutations in this gene lead to Bartter's syndrome, an inherited hypokalaemic alkalosis. NCCT is a thiazide-sensitive Na-Cl cotransporter that is primarily expressed in the distal convoluted tubule of the kidney where it accounts for a significant fraction of net renal sodium reabsorption. The gene for human NCCT map to chromosome 16q13. Mutations in the gene encoding NCCT cause Gitelman's syndrome, a subset of Bartter's syndrome.

Function:

Electrically silent transporter system. Mediates sodium and chloride reabsorption. Plays a vital role in the regulation of ionic balance and cell volume.

Subcellular Location:

Membrane; Multi-pass membrane protein.

Tissue Specificity:

Expressed in many tissues.

Post-translational modifications:

Phosphorylated upon DNA damage, probably by ATM or ATR.

Similarity:

Belongs to the SLC12A transporter family.

SWISS:

P55011

Gene ID:

6558

Database links:

[Entrez Gene: 471620](#) Chimpanzee

[Entrez Gene: 286845](#) Cow

[Entrez Gene: 481490](#) Dog

[Entrez Gene: 6558](#) Human

[Entrez Gene: 20496](#) Mouse

[Entrez Gene: 100516960](#) Pig

[Entrez Gene: 83629](#) Rat

[Omim: 600840](#) Human

[SwissProt: P55011](#) Human

[SwissProt: P55012](#) Mouse

[Unigene: 162585](#) Human

[Unigene: 712970](#) Human

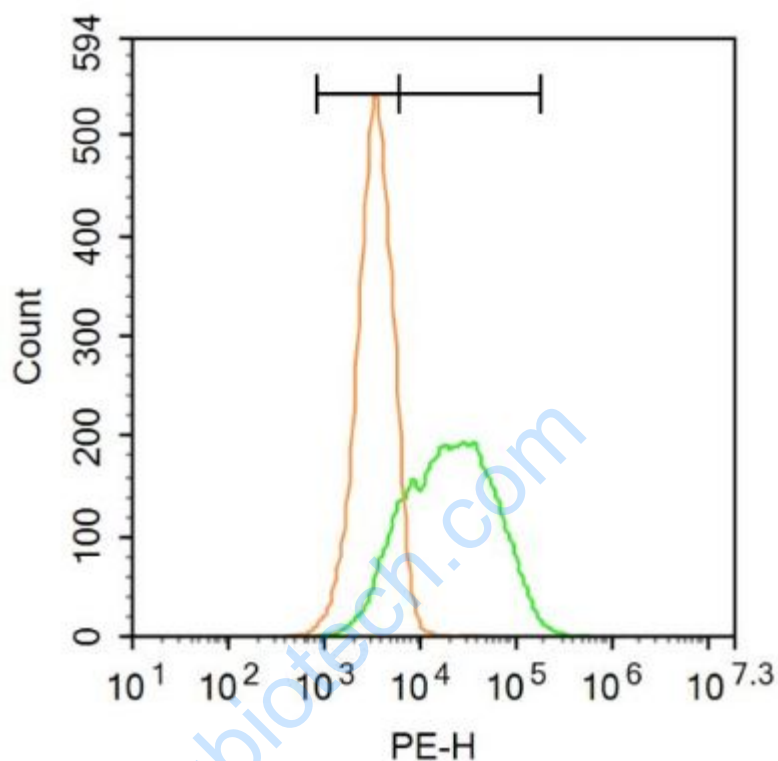
[Unigene: 399997](#) Mouse

[Unigene: 11523](#) Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

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Picture:

Blank control: A549.

Primary Antibody (green line): Rabbit Anti-SLC12A2 antibody (SL6945R)

Dilution: $3\mu\text{g} / 10^6$ cells;

Isotype Control Antibody (orange line): Rabbit IgG .

Secondary Antibody : Goat anti-rabbit IgG-PE

Dilution: $3\mu\text{g} / \text{test}$.

Protocol

The cells were incubated in 5%BSA to block non-specific protein-protein interactions for 30 min at room temperature .Cells stained with Primary Antibody for 30 min at room temperature. The secondary antibody used for 40 min at room

	temperature. Acquisition of 20,000 events was performed.
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