

# SLC12A1 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP57665

## Product Information

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<b>Application</b>	IHC-P, IHC-F, IF, ICC, E
<b>Primary Accession</b>	<a href="#">Q13621</a>
<b>Reactivity</b>	Rat, Pig, Dog, Bovine
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>Calculated MW</b>	121450
<b>Physical State</b>	Liquid
<b>Immunogen</b>	KLH conjugated synthetic peptide derived from human SLC12A1
<b>Epitope Specificity</b>	951-1050/1099
<b>Isotype</b>	IgG
<b>Purity</b>	affinity purified by Protein A
<b>Buffer</b>	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
<b>SUBCELLULAR LOCATION</b>	Membrane.
<b>SIMILARITY</b>	Belongs to the SLC12A transporter family.
<b>DISEASE</b>	Defects in SLC12A1 are the cause of Bartter syndrome type 1 (BS1) [MIM:601678]. BS refers to a group of autosomal recessive disorders characterized by impaired salt reabsorption in the thick ascending loop of Henle with pronounced salt wasting, hypokalemic metabolic alkalosis, and varying degrees of hypercalciuria. BS1 is a life-threatening condition beginning in utero, with marked fetal polyuria that leads to polyhydramnios and premature delivery. Another hallmark of BS1 is a marked hypercalciuria and, as a secondary consequence, the development of nephrocalcinosis and osteopenia.
<b>Important Note</b>	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
<b>Background Descriptions</b>	This gene encodes a kidney-specific sodium-potassium-chloride cotransporter that is expressed on the luminal membrane of renal epithelial cells of the thick ascending limb of Henle's loop and the macula densa. It plays a key role in concentrating urine and accounts for most of the NaCl resorption. It is sensitive to such diuretics as furosemide and bumetanide. Some Bartter-like syndromes result from defects in this gene. Alternative splicing results in multiple transcript variants encoding distinct isoforms. Additional splice variants have been described but their biological validity in humans has not been experimentally proven.[provided by RefSeq, May 2010].

## Additional Information

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<b>Gene ID</b>	6557
<b>Other Names</b>	Solute carrier family 12 member 1, Bumetanide-sensitive sodium-(potassium)-chloride cotransporter 2, Kidney-specific Na-K-Cl

	symporter, SLC12A1, NKCC2
<b>Target/Specificity</b>	Kidney specific.
<b>Dilution</b>	IHC-P=1:100-500,IHC-F=1:100-500,ICC=1:100-500,IF=1:100-500,ELISA=1:5000-10000
<b>Format</b>	0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce
<b>Storage</b>	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. 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.

## Protein Information

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<b>Name</b>	SLC12A1
<b>Synonyms</b>	NKCC2 {ECO:0000303   PubMed:8640224}
<b>Function</b>	Renal sodium, potassium and chloride ion cotransporter that mediates the transepithelial NaCl reabsorption in the thick ascending limb and plays an essential role in the urinary concentration and volume regulation (PubMed: <a href="#">21321328</a> ). Electrically silent transporter system (By similarity).
<b>Cellular Location</b>	Apical cell membrane; Multi-pass membrane protein
<b>Tissue Location</b>	Kidney; localizes to the thick ascending limbs (at protein level).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.