

Rabbit SLC4A4 Polyclonal Antibody | anti-SLC4A4 antibody

SLC4A4 Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA326983	Rabbit	Human, Mouse, Rat	ELISA, Immunohistochemistry, Western Blot

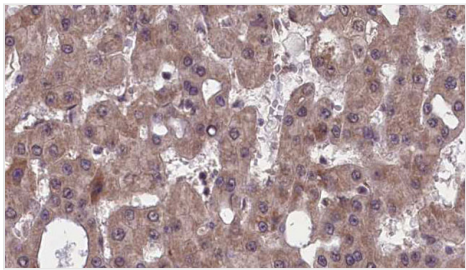
PRODUCT SYNONYMS

SLC4A4; Polyclonal Antibody; SLC4A4 Antibody; DKFZp781H1314; Electrogenic sodium bicarbonate cotransporter 1; hhNMC; HNBC 1; HNBC1; kNBC 1; KNBC; kNBC1; Na(+)/HCO3(-) cotransporter; Na+HCO3-cotransporter 4; NBC 1; NBC 2; NBC1; NBC2; Nbc4; NBCE 1; NBCE1; OTTHUMP00000160355; OTTHUMP00000218884; OTTHUMP00000218885; PNBC; S4A4_HUMAN; SLC4A5; Sodium bicarbonate cotransporter 1 (sodium bicarbonate cotransporter; kidney; sodium bicarbonate cotransporter; pancreas); Sodium bicarbonate cotransporter; Sodium bicarbonate cotransporter kidney; sodium bicarbonate cotransporter member 4; Sodium bicarbonate cotransporter pancreas; Solute carrier family 4 member 4; Solute carrier family 4 sodium bicarbonate cotransporter member 4; Solute carrier family 4 sodium bicarbonate cotransporter member 5; Solute carrier family 4; member 4; brain type; anti-SLC4A4 antibody

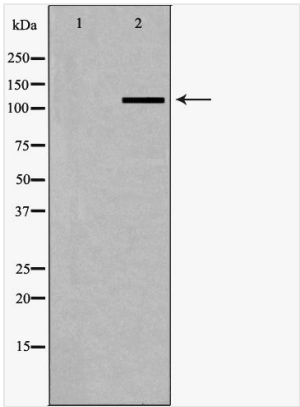
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	SLC4A4 antibody detects endogenous levels of total SLC4A4
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	1079
Applicable Applications for anti-SLC4A4 antibody	ELISA, IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human SLC4A4
Subcellular Location	Basolateral Cell Membrane.
Tissue Specificity	Isoform 1 is expressed in pancreas and to a lower extent in heart, skeletal muscle, liver, parotid salivary glands, prostate, colon, stomach, thyroid, brain and spinal chord. Corneal endothelium cells express only isoform 1 (at protein level). Isoform 2 is specifically expressed in kidney at the level of proximal tubules.
Predicted Cross Reactivity	Pig, Bovine, Rabbit, Dog, Chicken, Xenopus
Similarity	Pig (100%), Bovine (100%), Rabbit (100%), Dog (100%), Chicken (91%), Xenopus (82%)
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

IMAGES



IHC (Immunohistochemistry)
AAA326983 at 1/100 staining Human liver cancer tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.



WB (Western Blot)
Western blot analysis of A549 whole cell lysates, using SLC4A4 Antibody. The lane on the left is treated with the antigen-specific peptide.

ADDITIONAL INFORMATION

Related Product Information for anti-SLC4A4 antibody

Description: This gene encodes a sodium bicarbonate cotransporter (NBC) involved in the regulation of bicarbonate secretion and absorption and intracellular pH. Mutations in this gene are associated with proximal renal tubular acidosis. Multiple transcript variants encoding different isoforms have been found for this gene.

Function: Electrogenic sodium/bicarbonate cotransporter with a Na⁺:HCO₃⁻ stoichiometry varying from 1:2 to 1:3. May regulate bicarbonate influx/efflux at the basolateral membrane of cells and regulate intracellular pH.

Subunit Structure: Interacts with CA2/carbonic anhydrase 2 and CA4/carbonic anhydrase 4 which may regulate transporter activity (PubMed:12411514, PubMed:14567693, PubMed:15218065, PubMed:15563508). Isoform 1 but not isoform 2 interacts with AHCYL1 (via PEST domain when phosphorylated); the interaction increases SLC4A4 isoform 1 activity (PubMed:16769890). Interacts with AHCYL2 (By similarity).

Post-translational Modifications: Phosphorylation of Ser-1026 by PKA increases the binding of CA2 and changes the Na⁺:HCO₃⁻ stoichiometry of the transporter from 3:1 to 2:1. Phosphorylated in presence of STK39 and dephosphorylated in presence of PP1 phosphatase; phosphorylation seems to inhibit SLC4A4 activity. N-glycosylation is not necessary for the transporter basic functions.

Similarity: Belongs to the anion exchanger (TC 2.A.31) family.

NCBI AND UNIPROT INFORMATION

NCBI GI #	148596928
NCBI GeneID	8671
NCBI Accession #	NP_001091954.1
NCBI GenBank Nucleotide #	NM_001098484.2
UniProt Accession #	Q9Y6R1; O15153; Q8NEJ2; Q9H262; Q9NRZ1; Q9UIC0; Q9UIC1; Q9UP50; C4B714
Molecular Weight	Observed: 121 kDa Predicted: 122 kDa
NCBI Official Full Name	electrogenic sodium bicarbonate cotransporter 1 isoform 1
NCBI Official Synonym Full Names	solute carrier family 4 member 4
NCBI Official Symbol	SLC4A4
NCBI Official Synonym Symbols	KNBC; NBC1; NBC2; pNBC; HNBC1; hhNMC; kNBC1; SLC4A5; NBCe1-A
NCBI Protein Information	electrogenic sodium bicarbonate cotransporter 1
UniProt Protein Name	Electrogenic sodium bicarbonate cotransporter 1
UniProt Gene Name	SLC4A4

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com

Online datasheet: <https://stage.aaabiotech.com/polyclonal/slc4a4-antibody-immunohistochemistry-western-blot-elisa/326983>