SunLong Biotech Co.,LTD
Tel: 0086-571- 56623320 Fax:0086-571- 56623318
E-mail:sales@sunlongbiotech.com
www.sunlongbiotech.com

Rabbit Anti-SLC4A4 antibody

SL2096R

Product Name:	SLC4A4
Chinese Name:	碳酸氢钠协同Transporter4-A4抗体
Alias:	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; PNBC; SLC4A5; 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.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Rabbit,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=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:	116kDa
Cellular localization:	The cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human electrogenic sodium bicarbonate cotransporter 1 isoform 2:1-100/1035<Cytoplasmic>
Lsotype:	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:	SLC4A4 (Electrogenic sodium bicarbonate cotransporter 1) is an electrogenic sodium/bicarbonate cotransporter with a Na(+):HCO3(-) stoichiometry varying from 1:2 to 1:3. It may regulate bicarbonate influx/efflux at the basolateral membrane of cells and regulate intracellular pH. SLC4A4 interacts with carbonic anhydrase 2 and carbonic anhydrase 4 which may regulate transporter activity. There are four named isoforms produced by alternative splicing. 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. [provided by RefSeq, Oct 2008]. **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:** Interacts with CA2/carbonic anhydrase 2 and CA4/carbonic anhydrase 4 which may regulate transporter activity. **Subcellular Location:** Basolateral cell membrane; Multi-pass membrane protein. **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. **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. Phosphorylation of Thr-49 regulates isoform 1 conductance. N-glycosylation is not necessary for the transporter basic functions. **DISEASE:** Defects in SLC4A4 are the cause of proximal renal tubular acidosis with ocular abnormalities (pRTA-OA) [MIM:604278]; also known as renal tubular acidosis II. Caused by an impairment of bicarbonate absorption in the proximal tubule, proximal renal tubular acidosis (pRTA) is characterized by a decreased renal HCO3(-) threshold. pRTA-OA is an extremely rare autosomal recessive syndrome characterized by short stature, profound pRTA, mental retardation, bilateral glaucoma, cataracts and bandkeratopathy. Note=Loss of interaction with and stimulation by CA4 is the cause of retinitis pigmentosa type 17 (RP17).

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

SWISS:
O88343

Gene ID:
8671

Database links:

Entrez Gene: 8671Human

Entrez Gene: 84484Rat

Omim: 603345Human

SwissProt: Q9Y6R1Human

SwissProt: Q9XSZ4Rabbit

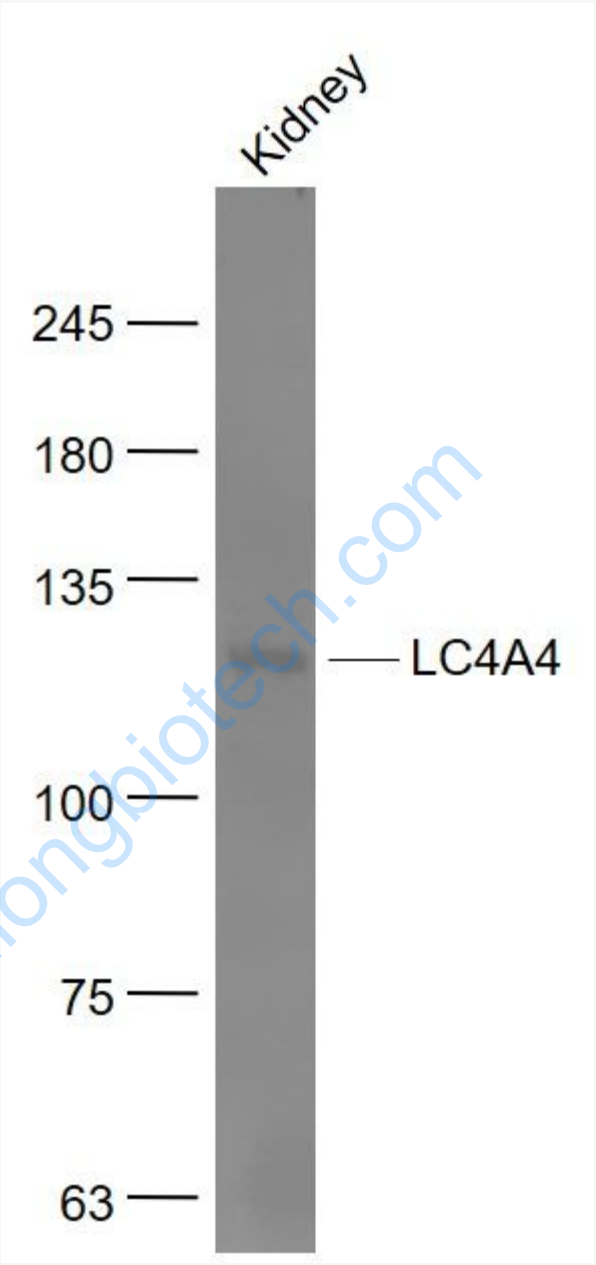
SwissProt: Q9JI66Rat

Unigene: 5462Human

Unigene: 11114Rat

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

Picture:



Sample:

Kidney (Mouse) Lysate at 40 ug

Primary: Anti- SLC4A4 (SL2096R) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 116 kD

	Observed band size: 116 kD