

SLC4A8 Antibody (N-term) Blocking Peptide

Synthetic peptide Catalog # BP18549a

Specification

SLC4A8 Antibody (N-term) Blocking Peptide - Product Information

Primary Accession

Q2Y0W8

SLC4A8 Antibody (N-term) Blocking Peptide - Additional Information

Gene ID 9498

Other Names

Electroneutral sodium bicarbonate exchanger 1, Electroneutral Na(+)-driven Cl-HCO3 exchanger, Solute carrier family 4 member 8, k-NBC3, S4A8

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

SLC4A8 Antibody (N-term) Blocking Peptide - Protein Information

Name SLC4A8 {ECO:0000312|EMBL:AAY79176.1, ECO:0000312|HGNC:HGNC:11034}

Function

Mediates electroneutral sodium- and carbonate-dependent chloride-HCO3(-) exchange with a Na(+):HCO3(-) stoichiometry of 2:1 (PubMed:18577713). Plays a major role in pH regulation in neurons (By similarity). Mediates sodium reabsorption in the renal cortical collecting ducts (By similarity).

Cellular Location

Apical cell membrane; Multi-pass membrane protein. Basolateral cell membrane {ECO:0000250|UniProtKB:Q6RVG2}; Multi-pass membrane protein. Cytoplasmic vesicle, secretory vesicle, synaptic vesicle membrane {ECO:0000250|UniProtKB:Q6RVG2}; Multi-pass membrane protein [Isoform 3]: Cell membrane; Multi-pass membrane protein [Isoform 5]: Cell membrane; Multi-pass membrane protein

Tissue Location

Expressed in the pyramidal cells of the hippocampus (at protein level). Highly expressed in all major regions of the brain, spinal column and in testis, and moderate levels in trachea, thyroid and medulla region of kidney. Low expression levels observed in pancreas and kidney cortex. [Isoform 4]: Expressed in the brain, heart and kidney.



SLC4A8 Antibody (N-term) Blocking Peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

• Blocking Peptides

SLC4A8 Antibody (N-term) Blocking Peptide - Images

SLC4A8 Antibody (N-term) Blocking Peptide - Background

SLC4A8 mediates electroneutral sodium-and carbonate-dependent choride-HCO3(-) exchange with a Na(+):HCO3(-) stoichiometry of 2:1. Plays a major role in pH regulation in neurons. May be involved in cell pH regulation by transporting HCO3(-) from blood to cell. Enhanced expression in severe acid stress could be important for cell survival by mediating the influx of HCO3(-) into the cells. Also mediates lithium-dependent HCO3(-) cotransport. May be regulated by osmolarity.

SLC4A8 Antibody (N-term) Blocking Peptide - References

Parker, M.D., et al. Physiol. Genomics 34(3):265-276(2008)Loiselle, F.B., et al. Am. J. Physiol., Cell Physiol. 286 (6), C1423-C1433 (2004):Pushkin, A., et al. Am. J. Physiol., Cell Physiol. 284 (3), C667-C673 (2003):Park, M., et al. J. Biol. Chem. 277(52):50503-50509(2002)Gresz, V., et al. Am. J. Physiol. Gastrointest. Liver Physiol. 283 (2), G473-G480 (2002):