

SLC4A7 Antibody (C-term) Blocking peptide
Synthetic peptide
Catalog # BP5655b**Specification**

SLC4A7 Antibody (C-term) Blocking peptide - Product Information

Primary Accession [O9Y6M7](#)
Other Accession [NP_003606.3](#)

SLC4A7 Antibody (C-term) Blocking peptide - Additional Information

Gene ID 9497

Other Names

Sodium bicarbonate cotransporter 3, Electroneutral Na/HCO₃ cotransporter, Sodium bicarbonate cotransporter 2, Sodium bicarbonate cotransporter 2b, Bicarbonate transporter, Solute carrier family 4 member 7, SLC4A7, BT, NBC2, NBC2B, NBC3, NBCn1, SBC2, SLC4A6

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.

SLC4A7 Antibody (C-term) Blocking peptide - Protein Information

Name SLC4A7

Synonyms BT, NBC2, NBC2B, NBC3, NBCn1, SBC2, SLC4

Function

Electroneutral sodium- and bicarbonate-dependent cotransporter with a Na(+):HCO₃(-) 1:1 stoichiometry (PubMed:10347222, PubMed:12403779, PubMed:14736710, PubMed:14578046). Mediates the sodium-dependent bicarbonate transport important for pH recovery after acid load as well as for regulation of steady-state pH in the duodenum and vascular smooth muscle cells (By similarity). Plays a key role in macrophage acidification, mediating bicarbonate import into the cytoplasm which is crucial for net acid extrusion and maintenance of cytoplasmic pH during phagocytosis (PubMed:29779931). Provides cellular bicarbonate for de novo purine and pyrimidine synthesis and is a key mediator of de novo nucleotide synthesis downstream of mTORC1 signaling in proliferating cells (PubMed:35772404).

Cellular Location

Basolateral cell membrane {ECO:0000250|UniProtKB:Q9R1N3}; Multi-pass membrane protein. Apical cell membrane {ECO:0000250|UniProtKB:Q9R1N3}; Multi-pass membrane protein. Cell projection, stereocilium {ECO:0000250|UniProtKB:Q9R1N3}. Cell membrane; Multi-pass membrane protein. Note=Localizes to the stereocilia of cochlear outer hair cells and to the lateral membrane of cochlear inner hair cells (By similarity). {ECO:0000250|UniProtKB:Q9R1N3}

Tissue Location

Highly expressed in testis and spleen. Also expressed in retina, colon, small intestine, ovary, thymus, prostate, muscle, heart and kidney.

SLC4A7 Antibody (C-term) Blocking peptide - Protocols

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

- [Blocking Peptides](#)

SLC4A7 Antibody (C-term) Blocking peptide - Images

SLC4A7 Antibody (C-term) Blocking peptide - Background

SLC4A7 regulates intracellular pH and may also play a role in bicarbonate salvage in secretory epithelia. Additionally, SLC4A7 may also have associated sodium channel activity.

SLC4A7 Antibody (C-term) Blocking peptide - References

Odefrey, F., et al. Cancer Res. 70(4):1449-1458(2010)Ahmed, S., et al. Nat. Genet. 41(5):585-590(2009)Ishiguro, H., et al. Addiction 102(8):1320-1325(2007)Ewing, R.M., et al. Mol. Syst. Biol. 3, 89 (2007) :Olsen, J.V., et al. Cell 127(3):635-648(2006)