

SLC9A1 Antibody (Center) Blocking Peptide
Synthetic peptide
Catalog # BP18823c**Specification**

SLC9A1 Antibody (Center) Blocking Peptide - Product InformationPrimary Accession [P19634](#)**SLC9A1 Antibody (Center) Blocking Peptide - Additional Information**

Gene ID 6548

Other Names

Sodium/hydrogen exchanger 1, APNH, Na(+)/H(+) antiporter, amiloride-sensitive, Na(+)/H(+) exchanger 1, NHE-1, Solute carrier family 9 member 1, SLC9A1, APNH1, NHE1

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.

SLC9A1 Antibody (Center) Blocking Peptide - Protein InformationName SLC9A1 ([HGNC:11071](#))**Function**

Electroneutral Na(+)/H(+) antiporter that extrudes Na(+) in exchange for external protons driven by the inward sodium ion chemical gradient, protecting cells from acidification that occurs from metabolism (PubMed: [7110335](http://www.uniprot.org/citations/7110335), PubMed: [7603840](http://www.uniprot.org/citations/7603840), PubMed: [11532004](http://www.uniprot.org/citations/11532004), PubMed: [11350981](http://www.uniprot.org/citations/11350981), PubMed: [15035633](http://www.uniprot.org/citations/15035633), PubMed: [14680478](http://www.uniprot.org/citations/14680478), PubMed: [17073455](http://www.uniprot.org/citations/17073455), PubMed: [22020933](http://www.uniprot.org/citations/22020933), PubMed: [27650500](http://www.uniprot.org/citations/27650500), PubMed: [15677483](http://www.uniprot.org/citations/15677483), PubMed: [32130622](http://www.uniprot.org/citations/32130622), PubMed: [17493937](http://www.uniprot.org/citations/17493937)). Exchanges intracellular H(+) ions for extracellular Na(+) in 1:1 stoichiometry (By similarity). Plays a key role in maintaining intracellular pH neutral and cell volume, and thus is important for cell growth, proliferation, migration and survival (PubMed: [7110335](http://www.uniprot.org/citations/7110335), PubMed: [7603840](http://www.uniprot.org/citations/7603840), PubMed: [11532004](http://www.uniprot.org/citations/11532004), PubMed: [11350981](http://www.uniprot.org/citations/11350981), PubMed: [15035633](http://www.uniprot.org/citations/15035633), PubMed: [14680478](http://www.uniprot.org/citations/14680478), PubMed: [17073455](http://www.uniprot.org/citations/17073455), PubMed: [22020933](http://www.uniprot.org/citations/22020933), PubMed: [27650500](http://www.uniprot.org/citations/27650500), PubMed: [15677483](http://www.uniprot.org/citations/15677483), PubMed: [32130622](http://www.uniprot.org/citations/32130622), PubMed: [17493937](http://www.uniprot.org/citations/17493937)).

[8901634](http://www.uniprot.org/citations/8901634), PubMed: [12947095](http://www.uniprot.org/citations/12947095), PubMed: [15096511](http://www.uniprot.org/citations/15096511), PubMed: [22020933](http://www.uniprot.org/citations/22020933)). In addition, can transport lithium Li(+) and functions also as a Na(+)/Li(+) antiporter (PubMed: [7603840](http://www.uniprot.org/citations/7603840)). SLC9A1 also functions in membrane anchoring and organization of scaffolding complexes that coordinate signaling inputs (PubMed: [15096511](http://www.uniprot.org/citations/15096511)).

Cellular Location

Cell membrane; Multi-pass membrane protein. Basolateral cell membrane {ECO:0000250|UniProtKB:P48762}; Multi-pass membrane protein. Note=Localized basolaterally in every epithelial cell, except in the choroid plexus where SLC9A1 is expressed lumenally.

Tissue Location

Kidney and intestine.

SLC9A1 Antibody (Center) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

SLC9A1 Antibody (Center) Blocking Peptide - Images

SLC9A1 Antibody (Center) Blocking Peptide - Background

The Na⁺/H⁺ antiporter (SLC9A1) is a ubiquitous membrane-bound enzyme involved in pH regulation of vertebrate cells. It is specifically inhibited by the diuretic drug amiloride and activated by a variety of signals including growth factors, mitogens, neurotransmitters, tumor promoters, and others (Mattei et al., 1988 [PubMed 2846238]).

SLC9A1 Antibody (Center) Blocking Peptide - References

Busco, G., et al. FASEB J. 24(10):3903-3915(2010) Yang, X., et al. Cancer Lett. 295(2):198-204(2010) Lauritzen, G., et al. Exp. Cell Res. 316(15):2538-2553(2010) Rotte, A., et al. Biochem. Biophys. Res. Commun. 398(4):677-682(2010) Holthouser, K.A., et al. Am. J. Physiol. Renal Physiol. 299 (1), F77-F90 (2010) :