

SLC41A1 Antibody (N-term) Blocking Peptide
Synthetic peptide
Catalog # BP17179a**Specification**

SLC41A1 Antibody (N-term) Blocking Peptide - Product InformationPrimary Accession [Q8IVJ1](#)**SLC41A1 Antibody (N-term) Blocking Peptide - Additional Information****Gene ID** 254428**Other Names**

Solute carrier family 41 member 1, SLC41A1

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.

SLC41A1 Antibody (N-term) Blocking Peptide - Protein Information**Name** SLC41A1 {ECO:0000303|PubMed:22031603, ECO:0000312|HGNC:HGNC:19429}**Function**

Na(+)/Mg(2+) ion exchanger that acts as a predominant Mg(2+) efflux system at the plasma membrane (PubMed:22031603, PubMed:23661805, PubMed:18367447, PubMed:23976986). Transporter activity is driven by the inwardly directed electrochemical gradient for Na(+) ions, thus directly depends on the extracellular Na(+) ion concentration set by Na(+)/K(+) pump (PubMed:22031603, PubMed:23661805). Generates circadian cellular Mg(2+) fluxes that feed back to regulate clock-controlled gene expression and metabolism and facilitate higher energetic demands during the day (PubMed:27074515). Has a role in regulating the activity of ATP-dependent enzymes, including those operating in Krebs cycle and the electron transport chain (By similarity).

Cellular Location

Cell membrane; Multi-pass membrane protein. Basolateral cell membrane; Multi-pass membrane

protein

Tissue Location

Highest expression levels in heart and testis, slightly less in skeletal muscles, prostate, adrenal gland and thyroid, and weakest in the hematopoietic tissues bones marrow, lymph node, thymus and spleen. In the kidney, it is expressed in the distal convoluted tubules, macula densa, and thick ascending limb tubular segments of the nephrons (PubMed:23661805)

SLC41A1 Antibody (N-term) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

SLC41A1 Antibody (N-term) Blocking Peptide - Images**SLC41A1 Antibody (N-term) Blocking Peptide - Background**

SLC41A1 acts as a magnesium transporter that is responsive to magnesium balance.

SLC41A1 Antibody (N-term) Blocking Peptide - References

Tucci, A., et al. Eur. J. Hum. Genet. (2010) In press :Satake, W., et al. Nat. Genet. 41(12):1303-1307(2009)Kolisek, M., et al. J. Biol. Chem. 283(23):16235-16247(2008)Goytain, A., et al. Physiol. Genomics 21(3):337-342(2005)Wabakken, T., et al. Biochem. Biophys. Res. Commun. 306(3):718-724(2003)