

**SLC11A2 Antibody (Center) Blocking peptide**  
**Synthetic peptide**  
**Catalog # BP13801c****Specification**

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**SLC11A2 Antibody (Center) Blocking peptide - Product Information**Primary Accession [P49281](#)**SLC11A2 Antibody (Center) Blocking peptide - Additional Information****Gene ID** 4891**Other Names**

Natural resistance-associated macrophage protein 2, NRAMP 2, Divalent cation transporter 1, Divalent metal transporter 1, DMT-1, Solute carrier family 11 member 2, SLC11A2, DCT1, DMT1, NRAMP2

**Target/Specificity**

The synthetic peptide sequence used to generate the antibody AP13801c was selected from the Center region of SLC11A2. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

**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.

**SLC11A2 Antibody (Center) Blocking peptide - Protein Information****Name** SLC11A2**Synonyms** DCT1, DMT1, NRAMP2**Function**

Proton-coupled metal ion symporter operating with a proton to metal ion stoichiometry of 1:1 (PubMed: [17109629](http://www.uniprot.org/citations/17109629)), PubMed: [22736759](http://www.uniprot.org/citations/22736759), PubMed: [25491917](http://www.uniprot.org/citations/25491917), PubMed: [17293870](http://www.uniprot.org/citations/17293870), PubMed: [25326704](http://www.uniprot.org/citations/25326704)). Selectively transports various divalent metal cations, in decreasing affinity: Cd(2+) > Fe(2+) > Co(2+), Mn(2+) >> Zn(2+), Ni(2+), VO(2+) (PubMed: [17109629](http://www.uniprot.org/citations/17109629), PubMed: [17109629](http://www.uniprot.org/citations/17109629)).

[22736759](http://www.uniprot.org/citations/22736759), PubMed: [25491917](http://www.uniprot.org/citations/25491917), PubMed: [17293870](http://www.uniprot.org/citations/17293870), PubMed: [25326704](http://www.uniprot.org/citations/25326704)). Essential for maintenance of iron homeostasis by modulating intestinal absorption of dietary Fe(2+) and TF-associated endosomal Fe(2+) transport in erythroid precursors and other cells (By similarity). Enables Fe(2+) and Mn(2+) ion entry into mitochondria, and is thus expected to promote mitochondrial heme synthesis, iron-sulfur cluster biogenesis and antioxidant defense (PubMed: [24448823](http://www.uniprot.org/citations/24448823)) (By similarity). Can mediate uncoupled fluxes of either protons or metal ions.

#### **Cellular Location**

[Isoform 1]: Early endosome membrane; Multi-pass membrane protein. Apical cell membrane; Multi-pass membrane protein. Note=Predominantly localizes in early endosomes that underlie the apical membrane of polarized epithelia. [Isoform 3]: Cell membrane

#### **Tissue Location**

Ubiquitously expressed. Expressed in erythroid progenitors.

### **SLC11A2 Antibody (Center) Blocking peptide - Protocols**

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

- [Blocking Peptides](#)

### **SLC11A2 Antibody (Center) Blocking peptide - Images**

### **SLC11A2 Antibody (Center) Blocking peptide - Background**

This gene encodes a member of the solute carrier family 11 protein family. The product of this gene transports divalent metals and is involved in iron absorption. Mutations in this gene are associated with hypochromic microcytic anemia with iron overload. A related solute carrier family 11 protein gene is located on chromosome 2. Multiple transcript variants encoding different isoforms have been found for this gene.

### **SLC11A2 Antibody (Center) Blocking peptide - References**

Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010) Ucisik-Akkaya, E., et al. Mol. Hum. Reprod. 16(10):770-777(2010) Rose, J.E., et al. Mol. Med. 16 (7-8), 247-253 (2010) :Tabuchi, M., et al. J. Cell. Sci. 123 (PT 5), 756-766 (2010) :Tabuchi, M., et al. Mol. Biol. Cell 13(12):4371-4387(2002)