

**SLC11A2 / DMT1 Antibody (Internal)**  
**Rabbit Polyclonal Antibody**  
**Catalog # ALS11084****Specification**

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**SLC11A2 / DMT1 Antibody (Internal) - Product Information**

Application	IHC
Primary Accession	<a href="#">P49281</a>
Reactivity	Human, Monkey
Host	Rabbit
Clonality	Polyclonal
Calculated MW	62kDa KDa

**SLC11A2 / DMT1 Antibody (Internal) - 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**

Human SLC11A2. BLAST analysis of the peptide immunogen showed no homology with other human proteins.

**Reconstitution & Storage**

Long term: -70°C; Short term: +4°C

**Precautions**

SLC11A2 / DMT1 Antibody (Internal) is for research use only and not for use in diagnostic or therapeutic procedures.

**SLC11A2 / DMT1 Antibody (Internal) - 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: [17293870](http://www.uniprot.org/citations/17293870), PubMed: [22736759](http://www.uniprot.org/citations/22736759), PubMed: [25326704](http://www.uniprot.org/citations/25326704), PubMed: [25491917](http://www.uniprot.org/citations/25491917)). Selectively transports various divalent metal cations, in decreasing affinity: Cd(2+) > Fe(2+) > Co(2+), Mn(2+) >> Zn(2+), Ni(2+), VO(2+) (PubMed: [a](#)

href="http://www.uniprot.org/citations/17109629" target="\_blank">17109629</a>, PubMed:<a href="http://www.uniprot.org/citations/17293870" target="\_blank">17293870</a>, PubMed:<a href="http://www.uniprot.org/citations/22736759" target="\_blank">22736759</a>, PubMed:<a href="http://www.uniprot.org/citations/25326704" target="\_blank">25326704</a>, PubMed:<a href="http://www.uniprot.org/citations/25491917" target="\_blank">25491917</a>). 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 (By similarity) (PubMed:<a href="http://www.uniprot.org/citations/24448823" target="\_blank">24448823</a>). 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.

#### Volume

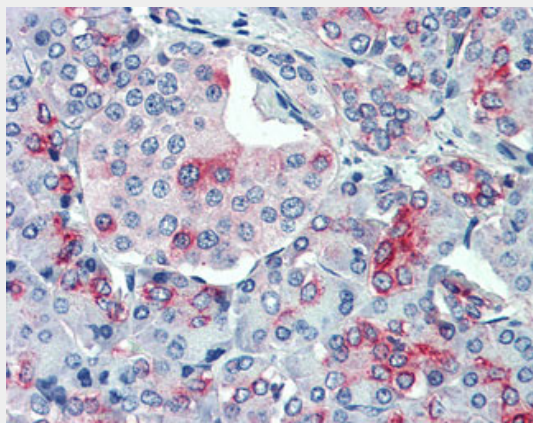
50 µl

#### SLC11A2 / DMT1 Antibody (Internal) - Protocols

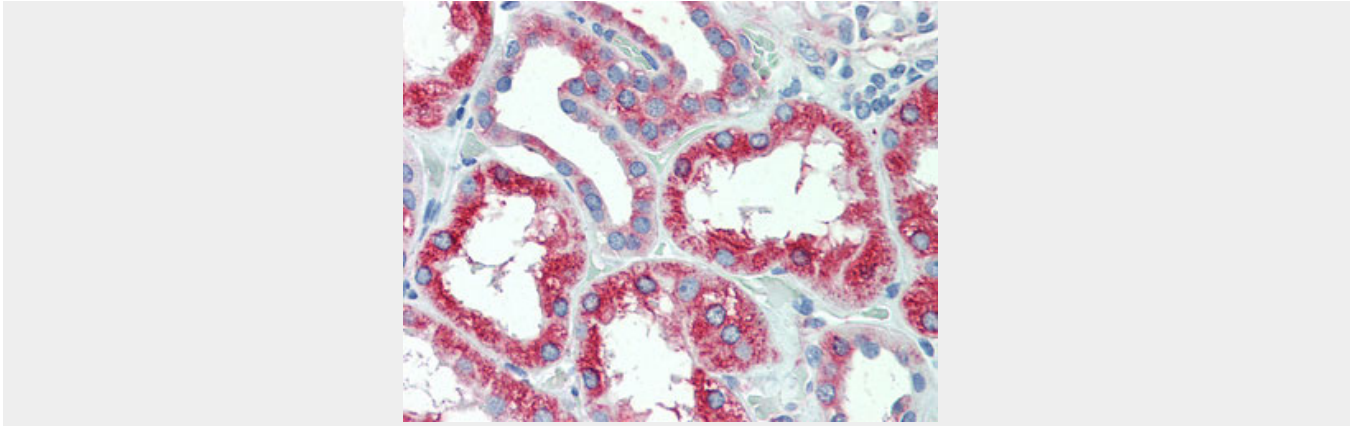
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

#### SLC11A2 / DMT1 Antibody (Internal) - Images



Anti-SLC11A2 antibody ALS11084 IHC of human, pancreas.



Anti-SLC11A2 antibody ALS11084 IHC of human, kidney.

### **SLC11A2 / DMT1 Antibody (Internal) - Background**

Important in metal transport, in particular iron. Can also transport manganese, cobalt, cadmium, nickel, vanadium and lead. Involved in apical iron uptake into duodenal enterocytes. Involved in iron transport from acidified endosomes into the cytoplasm of erythroid precursor cells. May play an important role in hepatic iron accumulation and tissue iron distribution. May serve to import iron into the mitochondria.

### **SLC11A2 / DMT1 Antibody (Internal) - References**

- Kishi F.,et al.Mol. Immunol. 34:839-842(1997).
- Kishi F.,et al.Biochem. Biophys. Res. Commun. 251:775-783(1998).
- Lee P.L.,et al.Blood Cells Mol. Dis. 24:199-215(1998).
- Hubert N.,et al.Proc. Natl. Acad. Sci. U.S.A. 99:12345-12350(2002).
- Worthington M.T.,et al.Submitted (FEB-1998) to the EMBL/GenBank/DDBJ databases.