10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

SLC11A2 / DMT1 Antibody (C-Terminus)

Rabbit Polyclonal Antibody
Catalog # ALS11085

Specification

SLC11A2 / DMT1 Antibody (C-Terminus) - Product Information

Application	**IHC**
Primary Accession	P49281
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**62kDa KDa**

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

SLC11A2 / DMT1 Antibody (C-Terminus) - 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, PubMed:17293870, PubMed:22736759, PubMed:25326704, PubMed: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, PubMed:17293870, PubMed:22736759, PubMed:25326704, PubMed:25491917). 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:24448823). 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.

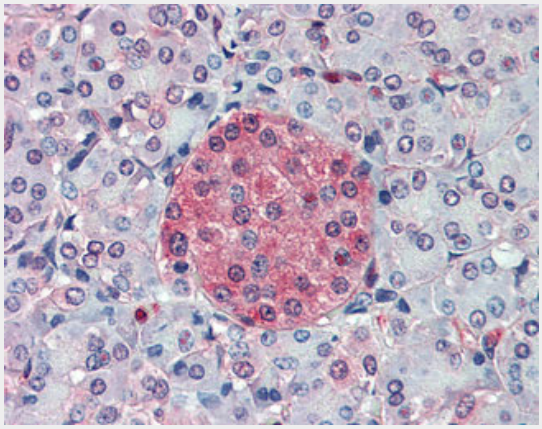
Volume
50 µl

SLC11A2 / DMT1 Antibody (C-Terminus) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

SLC11A2 / DMT1 Antibody (C-Terminus) - Images



Anti-SLC11A2 antibody ALS11085 IHC of human pancreas.

SLC11A2 / DMT1 Antibody (C-Terminus) - 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 (C-Terminus) - 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.