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SLC11A2 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP13801C

Specification

SLC11A2 Antibody (Center) - Product Information

Application	**IF, WB,E**
Primary Accession	P49281
Other Accession	NP_001167598.1, NP_000608.1
Reactivity	**Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Antigen Region	**262-291**

SLC11A2 Antibody (Center) - 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
This SLC11A2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 262-291 amino acids from the Central region of human SLC11A2.

Dilution
IF~~1:10~50
WB~~1:2000

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
SLC11A2 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

SLC11A2 Antibody (Center) - 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: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

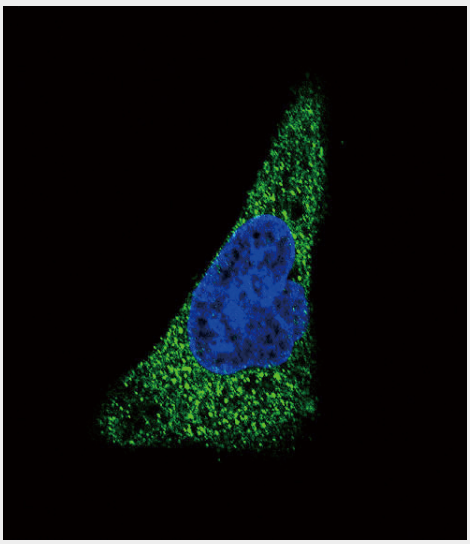
Tissue Location
Ubiquitously expressed. Expressed in erythroid progenitors.

SLC11A2 Antibody (Center) - Protocols

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

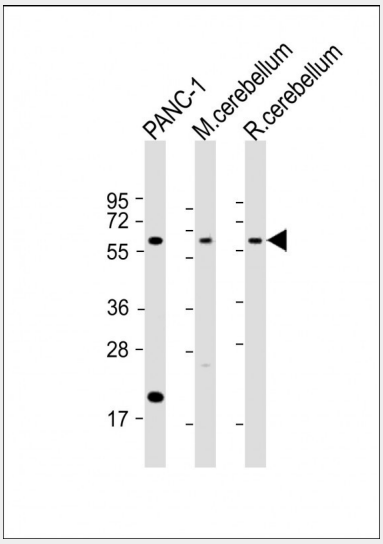
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

SLC11A2 Antibody (Center) - Images

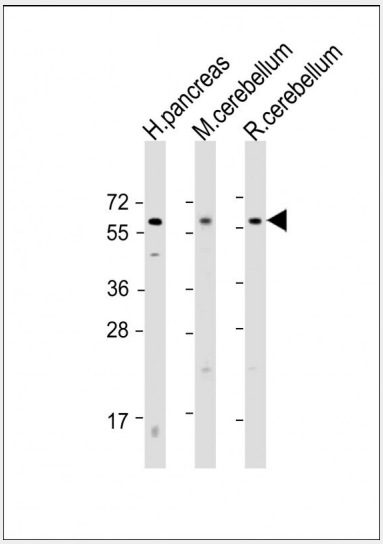


Confocal immunofluorescent analysis of SLC11A2 Antibody (Center) (Cat#AP13801c) with HepG2

cell followed by Alexa Fluor 488-conjugated goat anti-rabbit IgG (green). DAPI was used to stain the cell nuclear (blue).



All lanes : Anti-SLC11A2 Antibody (Center) at 1:2000 dilution Lane 1: PANC-1 whole cell lysate Lane 2: mouse cerebellum lysate Lane 3: rat cerebellum lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 62 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



All lanes : Anti-SLC11A2 Antibody (Center) at 1:2000 dilution Lane 1: human pancreas lysate Lane 2: mouse cerebellum lysate Lane 3: rat cerebellum lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 62 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

SLC11A2 Antibody (Center) - 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.

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SLC11A2 Antibody (Center) - 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)

SLC11A2 Antibody (Center) - Citations

- An ataxia-telangiectasia-mutated (ATM) kinase mediated response to DNA damage down-regulates the mRNA-binding potential of THOC5.
- Deciphering the luteal transcriptome: potential mechanisms mediating stage-specific luteolytic response of the corpus luteum to prostaglandin $F_2\alpha$.