

SLC30A10 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP19293b

Specification

SLC30A10 Antibody (C-term) - Product Information

WB,E Application **Primary Accession 06XR72** NP 061183.2 Other Accession Reactivity Human Host **Rabbit** Clonality **Polyclonal** Isotype Rabbit IgG Antigen Region 331-359

SLC30A10 Antibody (C-term) - Additional Information

Gene ID 55532

Other Names

Zinc transporter 10, ZnT-10, Solute carrier family 30 member 10, SLC30A10, ZNT10, ZNT8

Target/Specificity

This SLC30A10 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 331-359 amino acids of human SLC30A10.

Dilution

WB~~1:1000

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

SLC30A10 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

SLC30A10 Antibody (C-term) - Protein Information

Name SLC30A10 (<u>HGNC:25355</u>)

Function Calcium:manganese antiporter of the plasma membrane mediating the efflux of intracellular manganese coupled to an active extracellular calcium exchange (PubMed:30755481). Required for intracellular manganese homeostasis, an essential cation for the function of several



enzymes, including some crucially important for the metabolism of neurotransmitters and other neuronal metabolic pathways. Manganese can also be cytotoxic and induce oxidative stress, mitochondrial dysfunction and apoptosis (PubMed:22341972, PubMed:25319704, PubMed:27226609, PubMed:27307044, PubMed:26728129). Could also have an intracellular zinc ion transporter activity, directly regulating intracellular zinc ion homeostasis and more indirectly various signaling pathway and biological processes (PubMed:22427991, PubMed:26728129).

Cellular Location

Cell membrane; Multi-pass membrane protein. Golgi apparatus membrane; Multi-pass membrane protein. Recycling endosome membrane. Early endosome membrane; Multi-pass membrane protein. Note=Localization to the Golgi and plasma membrane is regulated by zinc.

Tissue Location

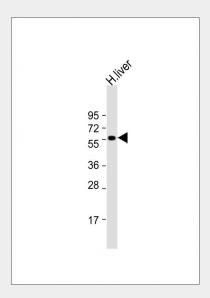
Specifically expressed in fetal liver and fetal brain (PubMed:15154973). Expressed in adult tissues with relative levels small intestine > liver > testes > brain > ovary > colon > cervix > prostate > placenta (PubMed:22706290). Expressed in liver and neurons of the nervous system (at protein level) (PubMed:22341971)

SLC30A10 Antibody (C-term) - Protocols

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

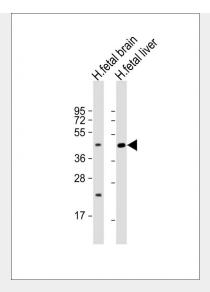
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

SLC30A10 Antibody (C-term) - Images

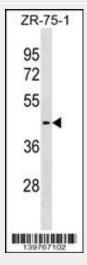


Anti-SLC30A10 Antibody (C-term) at 1:2000 dilution + human liver lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 53 kDa Blocking/Dilution buffer: 5% NFDM/TBST.





All lanes: Anti-SLC30A10 Antibody (C-term) at 1:2000 dilution Lane 1: human fetal brain lysate Lane 2: human fetal liver lysate Lysates/proteins at 20 μ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size: 53 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



SLC30A10 Antibody (C-term)(Cat. #AP19293b) western blot analysis in ZR-75-1 cell line lysates (35ug/lane). This demonstrates the SLC30A10 antibody detected the SLC30A10 protein (arrow).

SLC30A10 Antibody (C-term) - Background

Zinc functions as a cofactor for numerous enzymes, nuclear factors, and hormones and as an intra- and intercellular signal ion. Members of the zinc transporter (ZNT)/SLC30 subfamily of the cation diffusion facilitator family, such as SLC30A10, permit cellular efflux of zinc (Seve et al., 2004 [PubMed 15154973]).

SLC30A10 Antibody (C-term) - References

Wang, L., et al. Cancer Epidemiol. Biomarkers Prev. 17(12):3558-3566(2008) Seve, M., et al. BMC Genomics 5(1), 32(2004):

SLC30A10 Antibody (C-term) - Citations

• <u>Differential Targeting of SLC30A10/ZnT10 Heterodimers to Endolysosomal Compartments Modulates EGF-induced MEK/ERK1/2 Activity.</u>



