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SLC30A10 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP19293b

Product Information

Application	WB, E
Primary Accession	Q6XR72
Other Accession	NP_061183.2
Reactivity	Human
Predicted	Canine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB39767
Calculated MW	52684
Antigen Region	331-359

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 E~~Use at an assay dependent concentration.
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.

Protein Information

Name	SLC30A10 (HGNC:25355)
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:26728129, PubMed:27226609, PubMed:27307044). 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)

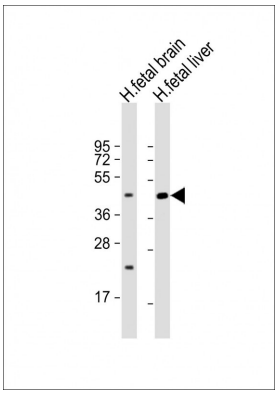
Background

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]).

References

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

Images



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 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.

Citations

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

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