

SLC30A2 Rabbit pAb

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Catalog # AP57948

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	Q9BRI3
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	40564
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human SLC30A2
Epitope Specificity	21-120/323
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	Preservative: 0.02% Proclin300, Constituents: 1% BSA, 0.01M PBS, pH7.4.
SUBCELLULAR LOCATION	Lysosome membrane and Vacuole membrane.
SIMILARITY	Belongs to the cation diffusion facilitator (CDF) transporter (TC 2.A.4) family. SLC30A subfamily.
DISEASE	The disease is caused by mutations affecting the gene represented in this entry. Disease description:A disorder occurring in breast-fed infants as a consequence of low milk zinc concentration in their nursing mothers, which cannot be corrected by maternal zinc supplementation. A large amount of zinc, an essential trace mineral, is required for normal growth particularly in infants, and breast milk normally contains adequate zinc to meet the requirement for infants up to 4 to 6 months of age. Zinc deficiency can lead to dermatitis, alopecia, decreased growth, and impaired immune function. The disorder shows autosomal dominant inheritance with incomplete penetrance.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	The protein encoded by this gene is a zinc transporter that acts as a homodimer. The encoded protein plays a role in secreting zinc into breast milk. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Aug 2015]

Additional Information

Gene ID	7780
Other Names	Proton-coupled zinc antiporter SLC30A2, Solute carrier family 30 member 2 {ECO:0000312 HGNC:HGNC:11013}, Zinc transporter 2, ZnT-2, SLC30A2 (HGNC:11013)
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500

Storage

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name

SLC30A2 ([HGNC:11013](#))

Function

[Isoform 1]: Electroneutral proton-coupled antiporter concentrating zinc ions into a variety of intracellular organelles including endosomes, zymogen granules and mitochondria. Thereby, plays a crucial role in cellular zinc homeostasis to confer upon cells protection against its potential cytotoxicity (PubMed:[17065149](#), PubMed:[21289295](#), PubMed:[22733820](#), PubMed:[25657003](#), PubMed:[25808614](#), PubMed:[30893306](#)). Regulates the zinc concentration of milk, through the transport of zinc ions into secretory vesicles of mammary cells (PubMed:[19496757](#)). By concentrating zinc ions into lysosomes participates to lysosomal-mediated cell death during early mammary gland involution (PubMed:[25808614](#)).

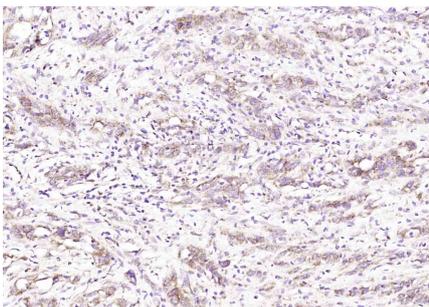
Cellular Location

[Isoform 1]: Cytoplasmic vesicle, secretory vesicle membrane; Multi-pass membrane protein. Zymogen granule membrane {ECO:0000250|UniProtKB:Q2HJ10}; Multi-pass membrane protein. Endosome membrane; Multi-pass membrane protein. Lysosome membrane; Multi-pass membrane protein. Mitochondrion inner membrane; Multi-pass membrane protein. Note=Localization to lysosomes is induced by TNF

Background

The protein encoded by this gene is a zinc transporter that acts as a homodimer. The encoded protein plays a role in secreting zinc into breast milk. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Aug 2015]

Images



Paraformaldehyde-fixed, paraffin embedded (Human ovarian); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (SLC30A2) Polyclonal Antibody, Unconjugated (AP57948) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.