

# SLC30A2 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP57948

## **Product Information**

Application Primary Accession Reactivity Host Clonality Calculated MW Physical State Immunogen Epitope Specificity Isotype Purity	IHC-P, IHC-F, IF, ICC, E <u>Q9BRI3</u> Human Rabbit Polyclonal 40564 Liquid KLH conjugated synthetic peptide derived from human SLC30A2 21-120/323 IgG affinity purified by Protein A
Buffer SUBCELLULAR LOCATION SIMILARITY	Preservative: 0.02% Proclin300, Constituents: 1% BSA, 0.01M PBS, pH7.4. Lysosome membrane and Vacuole membrane. 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	Zinc transporter 2, ZnT-2, Solute carrier family 30 member 2, SLC30A2, ZNT2
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,ICC=1:100-500,IF=1:100-500,ELISA=1:5000- 10000
Format	0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce

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 ( <u>HGNC:11013</u> )
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: <u>17065149</u> , PubMed: <u>21289295</u> , PubMed: <u>22733820</u> , PubMed: <u>25657003</u> , PubMed: <u>25808614</u> , PubMed: <u>30893306</u> ). Regulates the zinc concentration of milk, through the transport of zinc ions into secretory vesicles of mammary cells (PubMed: <u>19496757</u> ). By concentrating zinc ions into lysosomes participates to lysosomal-mediated cell death during early mammary gland involution (PubMed: <u>25808614</u> ).
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-alpha

#### 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) instructionsand DAB staining.

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