

## SLC24A6 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP57929

## **Product Information**

**Application** IHC-P, IHC-F, IF, ICC, E

Primary Accession

Reactivity
Rat, Pig, Dog
Host
Rabbit
Clonality
Polyclonal
Calculated MW
Physical State

Q6J4K2
Rat, Pig, Dog
Rabbit
Polyclonal
Liquid

**Immunogen** KLH conjugated synthetic peptide derived from human SLC24A6

Epitope Specificity 421-520/584

Isotype IgG

**Purity** affinity purified by Protein A

**Buffer** Preservative: 0.02% Proclin300, Constituents: 1% BSA, 0.01M PBS, pH7.4.

**SUBCELLULAR LOCATION** Cell membrane.

**SIMILARITY** Belongs to the sodium/potassium/calcium exchanger family. SLC24A

subfamily.

**Important Note** This product as supplied is intended for research use only, not for use in

human, therapeutic or diagnostic applications.

**Background Descriptions** SLC24A6 belongs to a family of potassium-dependent sodium/calcium

exchangers that maintain cellular calcium homeostasis through the electrogenic countertransport of 4 sodium ions for 1 calcium ion and 1 potassium ion (Cai and Lytton, 2004 [PubMed 14625281]).[supplied by OMIM,

Mar 2008]

## **Additional Information**

**Gene ID** 80024

Other Names Mitochondrial sodium/calcium exchanger protein, Na(+)/K(+)/Ca(2+)-exchange

protein 6, SLC8B1 (<u>HGNC:26175</u>)

**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

**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 SLC8B1 ( HGNC:26175)

**Function** Mitochondrial sodium/calcium antiporter that mediates sodium- dependent

calcium efflux from mitochondrion, by mediating the exchange of 3 sodium ions per 1 calcium ion (PubMed: 15060069, PubMed: 20018762,

PubMed:22829870, PubMed:23056385, PubMed:24898248,

PubMed:<u>28130126</u>, PubMed:<u>28219928</u>). Plays a central role in mitochondrial calcium homeostasis by mediating mitochondrial calcium extrusion: calcium efflux is essential for mitochondrial function and cell survival, notably in cardiomyocytes (By similarity). Regulates rates of glucose- dependent insulin secretion in pancreatic beta-cells during the first phase of insulin secretion: acts by mediating efflux of calcium from mitochondrion, thereby affecting

cytoplasmic calcium responses (PubMed:23056385). Required for

store-operated Ca(2+) entry (SOCE) and Ca(2+) release-activated Ca(2+) (CRAC)

channel regulation: sodium transport by SLC8B1 leads to promote calcium-shuttling that modulates mitochondrial redox status, thereby regulating SOCE activity (PubMed:28219928). Involved in B-lymphocyte chemotaxis (By similarity). Able to transport Ca(2+) in exchange of either Li(+) or Na(+), explaining how Li(+) catalyzes Ca(2+) exchange (PubMed:15060069, PubMed:28130126). In contrast to other members of the family its function is

independent of K(+) (PubMed: 15060069).

**Cellular Location** Mitochondrion inner membrane; Multi-pass membrane protein

**Tissue Location** Present in pancreatic beta-cells (at protein level).

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