

NCX1 Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP51525**Specification**

NCX1 Antibody - Product Information

Application	WB, E
Primary Accession	P32418
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	108 KDa

NCX1 Antibody - Additional Information**Gene ID** 6546**Other Names**

Sodium/calcium exchanger 1, Na(+)/Ca(2+)-exchange protein 1, Solute carrier family 8 member 1, SLC8A1, CNC, NCX1

Format

0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%

Storage

Store at -20 °C. Stable for 12 months from date of receipt

NCX1 Antibody - Protein Information**Name** SLC8A1**Function**

Mediates the exchange of one Ca(2+) ion against three to four Na(+) ions across the cell membrane, and thereby contributes to the regulation of cytoplasmic Ca(2+) levels and Ca(2+)-dependent cellular processes (PubMed:[11241183](http://www.uniprot.org/citations/11241183)), PubMed:[1374913](http://www.uniprot.org/citations/1374913)), PubMed:[1476165](http://www.uniprot.org/citations/1476165)). Contributes to Ca(2+) transport during excitation-contraction coupling in muscle (PubMed:[11241183](http://www.uniprot.org/citations/11241183)), PubMed:[1374913](http://www.uniprot.org/citations/1374913)), PubMed:[1476165](http://www.uniprot.org/citations/1476165)). In a first phase, voltage-gated channels mediate the rapid increase of cytoplasmic Ca(2+) levels due to release of Ca(2+) stores from the endoplasmic reticulum (PubMed:[11241183](http://www.uniprot.org/citations/11241183)), PubMed:[1374913](http://www.uniprot.org/citations/1374913)), PubMed:[1476165](http://www.uniprot.org/citations/1476165)). SLC8A1 mediates the export of Ca(2+) from the cell during the next phase, so that cytoplasmic Ca(2+)

levels rapidly return to baseline (PubMed:11241183, PubMed:1374913, PubMed:1476165). Required for normal embryonic heart development and the onset of heart contractions (By similarity).

Cellular Location

Cell membrane; Multi-pass membrane protein

Tissue Location

Detected primarily in heart and at lower levels in brain (PubMed:1374913). Expressed in cardiac sarcolemma, brain, kidney, liver, pancreas, skeletal muscle, placenta and lung (PubMed:1476165)

NCX1 Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

NCX1 Antibody - Images

NCX1 Antibody - Background

Rapidly transports Ca(2+) during excitation-contraction coupling. Ca(2+) is extruded from the cell during relaxation so as to prevent overloading of intracellular stores.

NCX1 Antibody - References

Komuro I.,et al.Proc. Natl. Acad. Sci. U.S.A. 89:4769-4773(1992).
Van Eylen F.,et al.J. Endocrinol. 168:517-526(2001).
Mangini N.J.,et al.Submitted (FEB-1999) to the EMBL/GenBank/DDBJ databases.
Ota T.,et al.Nat. Genet. 36:40-45(2004).
Hillier L.W.,et al.Nature 434:724-731(2005).