

**NCX1 Polyclonal Antibody**  
**Catalog # AP73286****Specification**

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**NCX1 Polyclonal Antibody - Product Information**

Application	WB
Primary Accession	<a href="#">P32418</a>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal

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

SLC8A1; CNC; NCX1; Sodium/calcium exchanger 1; Na(+)/Ca(2+)-exchange protein 1

**Dilution**

WB~~Western Blot: 1/500 - 1/2000. ELISA: 1/5000. Not yet tested in other applications.

**Format**

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

**Storage Conditions**

-20°C

**NCX1 Polyclonal 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:<a href="http://www.uniprot.org/citations/11241183" target="\_blank">11241183</a>, PubMed:<a href="http://www.uniprot.org/citations/1374913" target="\_blank">1374913</a>, PubMed:<a href="http://www.uniprot.org/citations/1476165" target="\_blank">1476165</a>). Required for normal embryonic heart development and the onset of heart contractions (By similarity).

#### Cellular Location

Cell membrane; Multi-pass membrane protein

#### Tissue Location

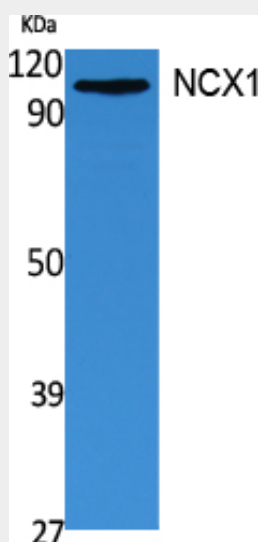
Detected primarily in heart and at lower levels in brain (PubMed:1374913). Expressed in cardiac sarcolemma, brain, kidney, liver, pancreas, skeletal muscle, placenta and lung (PubMed:1476165)

### NCX1 Polyclonal Antibody - Protocols

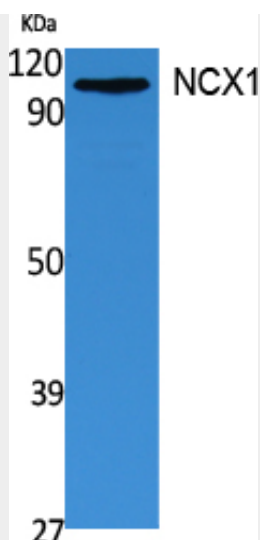
Provided below are standard protocols that you may find useful for product applications.

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

### NCX1 Polyclonal Antibody - Images



Western Blot analysis of extracts from 293 cells, using NCX1 Polyclonal Antibody.. Secondary antibody was diluted at 1:20000



Western Blot analysis of extracts from 293 cells, using NCX1 Polyclonal Antibody.. Secondary antibody was diluted at 1:20000

#### **NCX1 Polyclonal Antibody - Background**

Mediates the exchange of one  $\text{Ca}^{2+}$  ion against three to four  $\text{Na}^{+}$  ions across the cell membrane, and thereby contributes to the regulation of cytoplasmic  $\text{Ca}^{2+}$  levels and  $\text{Ca}^{2+}$ -dependent cellular processes (PubMed:1374913, PubMed:11241183, PubMed:1476165). Contributes to  $\text{Ca}^{2+}$  transport during excitation-contraction coupling in muscle. In a first phase, voltage-gated channels mediate the rapid increase of cytoplasmic  $\text{Ca}^{2+}$  levels due to release of  $\text{Ca}^{2+}$  stores from the endoplasmic reticulum. SLC8A1 mediates the export of  $\text{Ca}^{2+}$  from the cell during the next phase, so that cytoplasmic  $\text{Ca}^{2+}$  levels rapidly return to baseline. Required for normal embryonic heart development and the onset of heart contractions.