

Product Name: NCX1 Rabbit Polyclonal Antibody
Catalog #: APRab14461



Summary

Production Name	NCX1 Rabbit Polyclonal Antibody
Description	Rabbit Polyclonal Antibody
Host	Rabbit
Application	WB
Reactivity	Human,Mouse,Rat

Performance

Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
Buffer	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Purification	Affinity purification

Immunogen

Gene Name	SLC8A1
Alternative Names	SLC8A1; CNC; NCX1; Sodium/calcium exchanger 1; Na(+)/Ca(2+)-exchange protein 1
Gene ID	6546.0
SwissProt ID	P32418.Synthesized peptide derived from NCX1 . at AA range: 270-350

Application

Dilution Ratio	WB 1:500-1:2000. ELISA: 1:5000.
Molecular Weight	108kD

Background

In cardiac myocytes, Ca(2+) concentrations alternate between high levels during contraction and low levels during relaxation. The increase in Ca(2+) concentration during contraction is primarily due to release of Ca(2+) from intracellular

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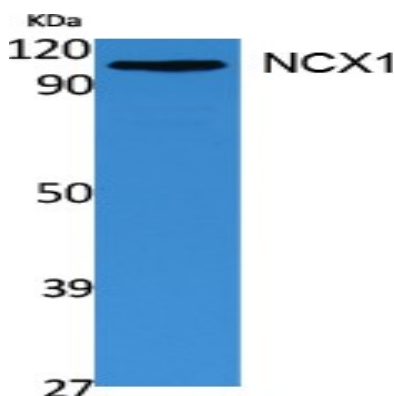


stores. However, some Ca^{2+} also enters the cell through the sarcolemma (plasma membrane). During relaxation, Ca^{2+} is sequestered within the intracellular stores. To prevent overloading of intracellular stores, the Ca^{2+} that entered across the sarcolemma must be extruded from the cell. The Na^{+} - Ca^{2+} exchanger is the primary mechanism by which the Ca^{2+} is extruded from the cell during relaxation. In the heart, the exchanger may play a key role in digitalis action. The exchanger is the dominant mechanism in returning the cardiac myocyte to its resting state following excitation.[supplied by OMIM, Apr 2004],alternative products:Additional isoforms seem to exist,enzyme regulation:By ATP.,function: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.,similarity:Belongs to the sodium/potassium/calcium exchanger family. SLC8 subfamily.,similarity:Contains 2 Calx-beta domains.,tissue specificity:Cardiac sarcolemma.,

Research Area

Calcium;Cardiac muscle contraction;Hypertrophic cardiomyopathy (HCM);Arrhythmogenic right ventricular cardiomyopathy (ARVC);Dilated cardiomyopathy;

Image Data



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

Note

For research use only.