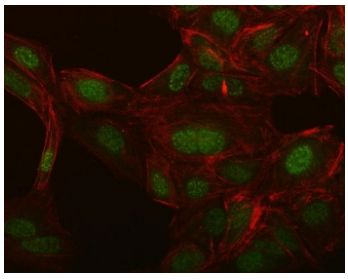
NCX1 Antibody / SLC8A1 (RQ8309)

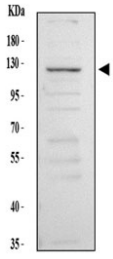
Catalog No.	Formulation	Size
RQ8309	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Antigen affinity purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	P32418
Localization	Nuclear, plasma membrane
Applications	Western Blot : 0.5-1ug/ml Immunofluorescence : 5ug/ml Direct ELISA : 0.1-0.5ug/ml
Limitations	This NCX1 antibody is available for research use only.



Immunofluorescent staining of FFPE human U-2 OS cells with NCX1 antibody (green) and Phalloidin (red). HIER: steam section in pH6 citrate buffer for 20 min.



Western blot testing of human K562 cell lysate with NCX1 antibody. Predicted molecular weight: 105-108 kDa (multiple isoforms) but may be observed at higher molecular weights due to glycosylation.

Description

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 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.

Application Notes

Optimal dilution of the NCX1 antibody should be determined by the researcher.

Immunogen

An E.coli-derived human recombinant protein (E301-Q686) was used as the immunogen for the NCX1 antibody.

Storage

After reconstitution, the NCX1 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.