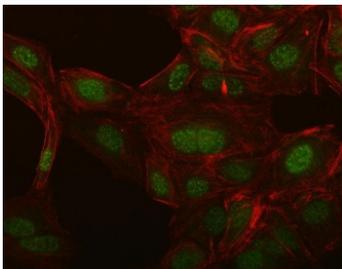


## NCX1 Antibody / SLC8A1 (RQ8309)

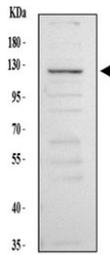
Catalog No.	Formulation	Size
RQ8309	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

### Bulk quote request

<b>Availability</b>	1-3 business days
<b>Species Reactivity</b>	Human
<b>Format</b>	Antigen affinity purified
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal (rabbit origin)
<b>Isotype</b>	Rabbit IgG
<b>Purity</b>	Antigen affinity purified
<b>Buffer</b>	Lyophilized from 1X PBS with 2% Trehalose
<b>UniProt</b>	P32418
<b>Localization</b>	Nuclear, plasma membrane
<b>Applications</b>	Western Blot : 0.5-1ug/ml Immunofluorescence : 5ug/ml Direct ELISA : 0.1-0.5ug/ml
<b>Limitations</b>	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,  $\text{Ca}^{2+}$  concentrations alternate between high levels during contraction and low levels during relaxation. The increase in  $\text{Ca}^{2+}$  concentration during contraction is primarily due to release of  $\text{Ca}^{2+}$  from intracellular stores. However, some  $\text{Ca}^{2+}$  also enters the cell through the sarcolemma (plasma membrane). During relaxation,  $\text{Ca}^{2+}$  is sequestered within the intracellular stores. To prevent overloading of intracellular stores, the  $\text{Ca}^{2+}$  that entered across the sarcolemma must be extruded from the cell. The  $\text{Na}^{+}$ - $\text{Ca}^{2+}$  exchanger is the primary mechanism by which the  $\text{Ca}^{2+}$  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 4°C. For long-term, aliquot and store at -20°C. Avoid repeated freezing and thawing.