

Product datasheet for RC226269L3V

OriGene Technologies, Inc.

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NCX1 (SLC8A1) (NM_001112802) Human Tagged ORF Clone Lentiviral Particle

Product data:

Product Type: Lentiviral Particles

Product Name: NCX1 (SLC8A1) (NM_001112802) Human Tagged ORF Clone Lentiviral Particle

Symbol: NCX1
Synonyms: NCX1

Mammalian Cell Pi

Selection:

Puromycin

Vector: pLenti-C-Myc-DDK-P2A-Puro (PS100092)

Tag: Myc-DDK

ACCN: NM_001112802

ORF Size: 2811 bp

ORF Nucleotide

Sequence:

The ORF insert of this clone is exactly the same as(RC226269).

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional

amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA.

Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence

verification at a reduced cost. Please contact our customer care team at

<u>custsupport@origene.com</u> or by calling 301.340.3188 option 3 for pricing and delivery.

The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing

variants is recommended prior to use. More info

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression

varies depending on the nature of the gene.

RefSeq: NM 001112802.1

RefSeq ORF: 2814 bp **Locus ID:** 6546





NCX1 (SLC8A1) (NM_001112802) Human Tagged ORF Clone Lentiviral Particle - RC226269L3V

UniProt ID: P32418

Cytogenetics: 2p22.1

Protein Families: Transmembrane

Protein Pathways: Arrhythmogenic right ventricular cardiomyopathy (ARVC), Calcium signaling pathway, Cardiac

muscle contraction, Dilated cardiomyopathy, Hypertrophic cardiomyopathy (HCM)

MW: 104.5 kDa

Gene Summary: 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.[supplied by OMIM, Apr 2004]