

Product datasheet for **RC226277L4V**

NCX1 (SLC8A1) (NM_001112801) Human Tagged ORF Clone Lentiviral Particle

Product data:

Product Type:	Lentiviral Particles
Symbol:	NCX1
Synonyms:	NCX1
Mammalian Cell Selection:	Puromycin
Vector:	pLenti-C-mGFP-P2A-Puro (PS100093)
Tag:	mGFP
ACCN:	NM_001112801
ORF Size:	2880 bp

ORF Nucleotide Sequence: The ORF insert of this clone is exactly the same as(RC226277).

OTI Disclaimer: 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_001112801.1](#)

RefSeq ORF: 2883 bp

Locus ID: 6546

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: 107.1 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]