

Product datasheet for RC211873L3

OriGene Technologies, Inc.

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NCX1 (SLC8A1) (NM_021097) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: NCX1 (SLC8A1) (NM_021097) Human Tagged Lenti ORF Clone

Tag: Myc-DDK

Symbol: NCX1

Synonyms: NCX1

Mammalian Cell Puromycin

Selection:

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

E. coli Selection: Chloramphenicol (34 ug/mL)

ORF Nucleotide The ORF insert of this clone is exactly the same as(RC211873).

Sequence:

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF.

ACCN: NM_021097

ORF Size: 2919 bp



NCX1 (SLC8A1) (NM_021097) Human Tagged Lenti ORF Clone - RC211873L3

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.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube

containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method: 1. Centrifuge at 5,000xg for 5min.

2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.

3. Close the tube and incubate for 10 minutes at room temperature.

4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid

at the bottom.

5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of

shipping when stored at -20°C.

RefSeq: <u>NM 021097.2</u>

 RefSeq Size:
 6053 bp

 RefSeq ORF:
 2922 bp

 Locus ID:
 6546

 UniProt ID:
 P32418

Cytogenetics: 2p22.1

Domains: Calx-beta, Na_Ca_Ex **Protein Families:** Transmembrane

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

muscle contraction, Dilated cardiomyopathy, Hypertrophic cardiomyopathy (HCM)

MW: 108.5 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

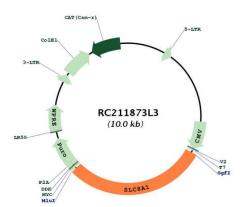
the cell through the sarcolemma (plasma membrane). During relaxation, Ca(2+) is

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]



Product images:



Circular map for RC211873L3