

## Product datasheet for RC211873L4V

## OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

## NCX1 (SLC8A1) (NM\_021097) Human Tagged ORF Clone Lentiviral Particle

**Product data:** 

**Product Type:** Lentiviral Particles

Product Name: NCX1 (SLC8A1) (NM 021097) Human Tagged ORF Clone Lentiviral Particle

Symbol: SLC8A Synonyms: NCX1

Mammalian Cell Puromycin

Selection:

**Vector:** pLenti-C-mGFP-P2A-Puro (PS100093)

Tag: mGFP

**ACCN:** NM\_021097 **ORF Size:** 2919 bp

**ORF Nucleotide** 

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

OTI Disclaimer:

Sequence:

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.

**RefSeg:** NM 021097.2

 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





## NCX1 (SLC8A1) (NM\_021097) Human Tagged ORF Clone Lentiviral Particle - RC211873L4V

**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]