

## Product datasheet for **TR301534**

### NCX1 (SLC8A1) Human shRNA Plasmid Kit (Locus ID 6546)

#### Product data:

Product Type:	shRNA Plasmids
Product Name:	NCX1 (SLC8A1) Human shRNA Plasmid Kit (Locus ID 6546)
Locus ID:	6546
Synonyms:	NCX1
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	SLC8A1 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 6546). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	<a href="#">NM_001112800</a> , <a href="#">NM_001112801</a> , <a href="#">NM_001112802</a> , <a href="#">NM_001252624</a> , <a href="#">NM_021097</a> , <a href="#">NM_001351483</a> , <a href="#">NM_001351484</a> , <a href="#">NM_001351485</a> , <a href="#">NM_001351486</a> , <a href="#">NM_001351487</a> , <a href="#">NM_001351488</a> , <a href="#">NM_001351489</a> , <a href="#">NM_001351490</a> , <a href="#">NM_001351491</a> , <a href="#">NM_001351492</a> , <a href="#">NM_001351493</a> , <a href="#">NM_001351494</a> , <a href="#">NM_021097.1</a> , <a href="#">NM_021097.2</a> , <a href="#">NM_001112802.1</a> , <a href="#">NM_001112801.1</a> , <a href="#">NM_001112800.1</a> , <a href="#">NM_001252624.1</a> , <a href="#">BC098285</a> , <a href="#">BC098308</a> , <a href="#">BC098345</a> , <a href="#">BC156359</a> , <a href="#">BC172488</a> , <a href="#">NM_001112800.2</a> , <a href="#">NM_021097.4</a> , <a href="#">NM_001112802.2</a> , <a href="#">NM_001112801.3</a> , <a href="#">NM_001252624.2</a>
UniProt ID:	<a href="#">P32418</a>
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]



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- shRNA Design:** These shRNA constructs were designed against multiple splice variants at this gene locus. To be certain that your variant of interest is targeted, please contact [techsupport@origene.com](mailto:techsupport@origene.com). If you need a special design or shRNA sequence, please utilize our [custom shRNA service](#).
- Performance Guaranteed:** OriGene guarantees that the sequences in the shRNA expression cassettes are verified to correspond to the target gene with 100% identity. One of the four constructs at minimum are guaranteed to produce 70% or more gene expression knock-down provided a minimum transfection efficiency of 80% is achieved. Western Blot data is recommended over qPCR to evaluate the silencing effect of the shRNA constructs 72 hrs post transfection. To properly assess knockdown, the gene expression level from the included scramble control vector must be used in comparison with the target-specific shRNA transfected samples.
- For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, please contact Technical Services at [techsupport@origene.com](mailto:techsupport@origene.com). Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).