

Product datasheet for **RG219110**

SLC8A3 (NM_182936) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	TurboGFP
Symbol:	SLC8A3
Synonyms:	NCX3
Mammalian Cell	Neomycin
Selection:	
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence: >RG219110 representing NM_182936
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGAAGAAGAGGAGGCCAAGAGGATAGCAGAGATGGGAAAGCCAGTATTGGGTGAACACCCCAAACCTAG
AAGTCATCATTGAAGAGTCCTATGAGTTCAAGACTACGGTGGACAAACTGATCAAGAAGACAAACCTGGC
CTTGTTGTGGGGACCCATTCTGGAGGGACAGTTTCATGGAGGCCATCACCGTCAGTGCAGCAGGGGAT
GAGGATGAGGATGAATCCGGGGAGGAGAGGCTGCCCTCCTGCTTTGACTACGTCATGCACTTCCTGACTG
TCTTCTGGAAGGTGCTGTTTGCCTGTGTGCCCCCACAGAGTACTGCCACGGCTGGGCCTGCTTCGCCGT
CTCCATCCTCATCATTGGCATGCTCACCGCCATCATTGGGGACCTGGCCTCGCACTTCGGCTGCACCAT
GGTCTCAAAGATTCACTCACAGCTGTTGTTTCGTGGCATTGGCACCTCTGTCCAGATACGTTTGCCA
GCAAAGCTGCTGCCCTCCAGGATGTATATGCAGACGCCTCATTGGCAACGTGACGGGCAGCAACGCCGT
CAATGTCTTCTGGGCATCGGCCTGGCCTGGTCCGTGGCCGCCATCTACTGGGCTCTGCAGGACAGGAG
TTCCACGTGTGGCCGGCACACTGGCCTTCTCCGTACCCCTCTTACCATCTTTGCATTGTCTGCATCA
GCGTGCTCTGTACCGAAGGCGGCCGACCTGGAGGGGAGCTTGGTGGCCCCGTGGCTGCAAGCTCGC
CACAACATGGCTCTTTGTAGCCTGTGGCTCCTCTACATACTCTTTGCCACACTAGAGGCCATTGCTAC
ATCAAGGGGTTC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



Protein Sequence:

>RG219110 representing NM_182936

Red=Cloning site Green=Tags(s)

MEEEEAKRIAEMGKPVLGHPKLEVIIIEESYEFKTTVDKLIKKTNLALVVGTHSWRDQFMEAITVSAAGD
EDEDESGEERLPSCFDYVMHFLTVMKVLFAVPPTEYCHGWACFAVSILIIIGMLTAIIGDLASHFGCTI
GLKDSVTAVVFVAFGTSVPDTFASKAAALQDVYADASIGNVTGSNAVNVFLGIGLAWSVAAIYWALQGQE
FHVSAGTLAFSVTLFTIFAFVCISVLLYRRRPHLGELGGPRGCKLATTWLFVSLWLLYILFATLEAYCY
IKGF

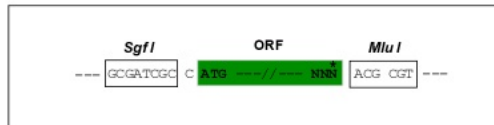
TRTRPLE - GFP Tag - V

Restriction Sites:

SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



CTATAGGGCGGCGGGAATTCGTGACTGGATCCGGTACCGAGGAGATCTGCCGCCGATCGCCGGCGCCAGATCT

EcoRI BamHI KpnI RBS Kozac Consensus SgfI AscI

CAAGCTTAAGTACTAGTAGCGGACCG ACG CGT ACG CGG CCG CTC GAG ATG GAG AGC GAC ---

HindIII NheI RsrII MluI NotI XhoI GFP Tag

T R T R P L E M E S D - - -

--- GAA GAA AGA GTT TAA ACGGCCGCGCGGAGCT

- - E E R V Stop

ACCN:

NM_182936

ORF Size:

852 bp

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:

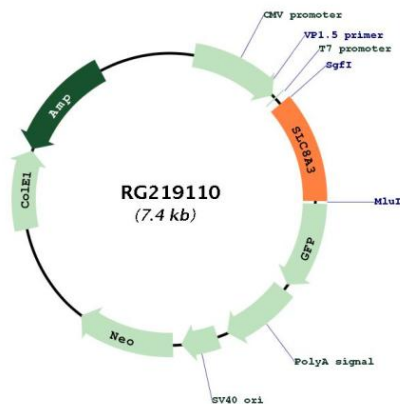
This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	NM_182936.3
RefSeq Size:	2845 bp
RefSeq ORF:	855 bp
Locus ID:	6547
UniProt ID:	P57103
Cytogenetics:	14q24.2
Protein Families:	Transmembrane
Protein Pathways:	Calcium signaling pathway
Gene Summary:	This gene encodes a member of the sodium/calcium exchanger integral membrane protein family. Na⁺/Ca²⁺ exchange proteins are involved in maintaining Ca²⁺ homeostasis in a wide variety of cell types. The protein is regulated by intracellular calcium ions and is found in both the plasma membrane and intracellular organellar membranes, where exchange of Na⁺ for Ca²⁺ occurs in an electrogenic manner. Alternative splicing has been observed for this gene and multiple variants have been described. [provided by RefSeq, Aug 2013]

Product images:



Circular map for RG219110