

## Product datasheet for **RG219164**

### SLC8A3 (NM\_183002) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	SLC8A3 (NM_183002) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	SLC8A3
Synonyms:	NCX3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide  
Sequence:

>RG219164 representing NM\_183002  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGGCGTGGTTAAGGTTGCAGCCTCTCACCTCTGCCTTCTCCATTTTGGGCTGGTTACCTTTGTGCTCT  
 TCCTGAATGGTCTTCGAGCAGAGGCTGGTGGCTCAGGGGACGTGCCAAGCACAGGGCAGAACAATGAGTC  
 CTGTTCAGGGTCACTCGGACTGCAAGGAGGGTGTATCCTGCCAATCTGGTACCCGGAGAACCCTTCCTT  
 GGGGACAAGATTGCCAGGGTCATTGTCTATTTTGTGGCCCTGATATACATGTTTCCTTGGGGTGTCCATCA  
 TTGCTGACCGCTTCATGGCATCTATTGAAGTCATCACCTCTCAAGAGAGGGAGGTGACAATTAAGAAACC  
 CAATGGAGAAACCAGCACAACTACTTCGGGTCTGGAATGAACTGTCTCAACCTGACCTTATGGCC  
 CTGGGTTCTCTGCTCCTGAGATACTCCTCTTTAATTGAGGTGTGGTTCATGGGTTTCATTGCTGGTG  
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 ATCTTTGCCTACATCTGGCTCTATATGATTCTGGCAGTCTTCTCCCTGGTGTGGTCCAGGTTTGGGAAG  
 GCCTCCTCACTCTCTTCTTTCCAGTGTGTCTTCTTGCCTGGGTGGCAGATAAACGACTGCTCTT  
 CTACAAATACATGCACAAAAAGTACCGCACAGACAAAACCGAGGAATTATCATAGAGACAGAGGGTGAC  
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 CGTGCCTTCTACCGTATCCAAGCCACTCGATGATGACTGGTGCAGGCAATATCCTGAAGAAACATATTC  
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 GAGGAGCAGCCAGAGGAGGGGATGCCTCCAGCAATATTCAACAGTCTTCCCTGCCTCGGGCTGTCTAG  
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 ATACGAAAGGCAAGAGAATTTCTTCATTGCCCTTGGTGAACCGAAATGGATGGAACGTGGAATATCAGCG  
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 AGATGGGAAAGCCAGTATTGGGTGAACACCCCAAACTAGAAGTCATCATTGAAGAGTCTATGAGTTCAA  
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 CCGTACCCTCTTACCATCTTTGCATTTGTCTGCATCAGCGTCTTGTACCGAAGGGCGGCCACCT  
 GGGAGGGAGCTTGGTGGCCCCGTGGCTGCAAGCTCGCCACAACATGGCTCTTGTGAGCCTGTGGCTC  
 CTCTACATACTCTTGGCACACTAGAGGCTATTGCTACATCAAGGGTTC

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG219164 representing NM\_183002  
 Red=Cloning site Green=Tags(s)

MAWLRQLPLTSAFLHFGLVTFVFLNGLRAEAGGSDVPSTGQNNESCSGSSDCKEGVILPIWYPENPSL  
 GDKIARIVYFVALIYMF LGVSIADRFMASIEVITSQEREVTIKKPNGETSTTTIRVWNETVSNLTLMA  
 LGSSAPEILLSLIEVCGHGFIAAGDLGPSTIVGSAAFNMFIIIGICVYVIPDGETRRIKHLRVFFITAAWS  
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 HPKGIEMDGMMNSHFLDGNLVPLEGKEVDESRREMIRILKDLKQKHPEKDLQLVEMANYALSHQOKS  
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 ALLSPDVTDRKLTMEEEEAKRIAEMGKPVLEHPKLEVIIEESYEFKTTVDKLIKKNLALVVGTHSWRD  
 QFMEAITVSAAGDEDESGEERLPSCFDYVMHFLT VFWKVL FACVPTEYCHGWACFAVSILIGMLTA  
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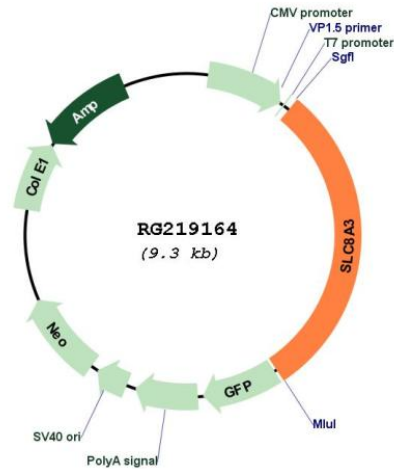
TRTRPLE - GFP Tag - V

Restriction Sites:

SgfI-MluI

Cloning Scheme:



**Plasmid Map:**


**ACCN:** NM\_183002

**ORF Size:** 2781 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.

**RefSeq:** [NM\\_183002.3](#)

**RefSeq Size:** 5268 bp

**RefSeq ORF:** 2784 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<sup>+</sup>/Ca<sup>2+</sup> exchange proteins are involved in maintaining Ca<sup>2+</sup> 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<sup>+</sup> for Ca<sup>2+</sup> occurs in an electrogenic manner. Alternative splicing has been observed for this gene and multiple variants have been described. [provided by RefSeq, Aug 2013]