

Product datasheet for **RG225818**

SLC39A14 (NM_001135154) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SLC39A14 (NM_001135154) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	SLC39A14
Synonyms:	cig19; HCIN; HMNDYT2; LZT-Hs4; NET34; ZIP14
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RG225818 representing NM_001135154
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGAAGCTGCTGCTGCTGCACCCGGCCTCCAGAGCTGCCTCCTGCTGACCTGCTTGCTTATGGAGAA
 CCACCCCTGAGGCTCACGCTTATCCCTGGGTGCCACAGCTATCAGCGCTGCCTCCTCCTGCAGGATCT
 AATACATCGGTATGGCGAGGGTGACAGCCTCACTCTGCAGCAGCTGAAGGCCCTACTCAACCACTGGAT
 GTGGGAGTGGGCCGGGTAATGTCACCCAGCACGTGCAAGGACACAGAACCTCTCCACGTGCTTTAGTT
 CTGGAGACCTTCTACTGCCACAATTTAGCGAGCAGTCGCGGATTGGGAGCAGCAGCTCCAGGAGTT
 CTGCCCCACCATCTCCAGCAGCTGGATTCCCGGGCCTGCACCTCGGAGAACCAGGAAAACGAGGAGAAT
 GAGCAGACGGAGGGGGCGCCAAGCGCTGTTGAAGTGTGGGGATACGGTCTCCTCTGTGTACCGTCA
 TCTCCCTCTGCTCCCTCTGGGGCCAGCGTGGTCCCTCATGAAGAAGACCTTTACAAGAGGCTGCT
 GCTCTACTTCATAGCTCTGGCGATTGGAACCTCTACTCCAACGCCCTTCCAGCTCATCCCGAGGCA
 TTTGGTTTCAACCTCTGGAAGATTATTATGTCTCCAAGTCTGCAGTGGTGTGGGGGCTTTATCTTT
 TCTTTTTCACAGAGAAGATCTTGAAGATTCTTCTTAAGCAGAAAAATGAGCATCATGACACAGCCA
 TTATGCCTCTGAGTCGTTCCCTCCAAGAAGACCAGGAGGAGGGGGTATGGAGAAGCTGCAGAACGGG
 GACCTGGACCACATGATTCCTCAGCACTGCAGCAGTGAAGTGGACGGCAAGGCGCCCATGGTGGACGAGA
 AGGTCAATGTGGGCTCGCTCTGTGCAGGACCTGCAGGCTTCCAGAGTGTGCTACTGGCTGAAAGG
 TGTCCGCTACTCTGATATCGGCACTCTGGCCTGGATGATCACTCTGAGCGACGGCCTCCATAATTTATC
 GATGGCTGGCCATCGGTGCTTCTTCTACTGTGTCAAGTTCCTCAAGGCATCAGCACCTCGGTGGCCATCC
 TCTGTGAGGAGTTCCACATGAGCTAGGAGACTTGTCACTCTGCTCAACGCTGGGATGAGCATCCAACA
 AGCTCTTCTTCAACTTCTTCTGCTGCTGCTACCTGGTCTGGCCTTTGGCATCTGGCCGGC
 AGCCACTTCTCTGCCAACTGGATTTTGCCTAGCTGGAGGAATGTTCTGTATATTTCTCTGGCTGATA
 TGATGGAGTTTCTGCTGTTGCCAGGCTGGAGTGAATGGTGCATCTCAGCTCACTGCAACCTCTGCC
 GCTTGGTTGAAGCGATTATCTGTCTAAGCCTCCCGAGTAAC

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>RG225818 representing NM_001135154
 Red=Cloning site Green=Tags(s)

MKLLLLHPAFQSCLLLTLGLWRTTPEAHASSLGAPAI SAASFLQDLIHRYGEGDSLTLQQLKALLNHL
 VGVGRGNVTQHVQGHRNLSTCFSSGDLFTAHNSEQSRIGSSELQEFCTILQQLDSRACTSENQENEEN
 EQTEEGRPSAVEVWGYGLLCVTVISLCSLLGASVVPFMKKTFFYKRLLLYFIALAIGTLYSNALFQLIPEA
 FGFNPLEDYVYSKSAVVFGGFYLFVTEKILKILLKQNEHHHGHSHYASESLPSKKDQEEGVMEKLQNG
 DLDHMIPQHCSSELDGKAPMVDEKVIIVGSLSVQDLQASQSACYWLGKGVRYSDIGTLAWMITLSDGLHNF
 DGLAIGASFTVSVFQGIISTVAIILCEEFPHELGDVILLNAGMSIQQALFFNFLSACCCYLGLAFGILAG
 SHFSANWIFALAGGMFLYISLADMMEFCSVAQAGVQWCHLSSLQPLPLGLKRLSCLSLPSN

TRTRPLE – GFP Tag – V

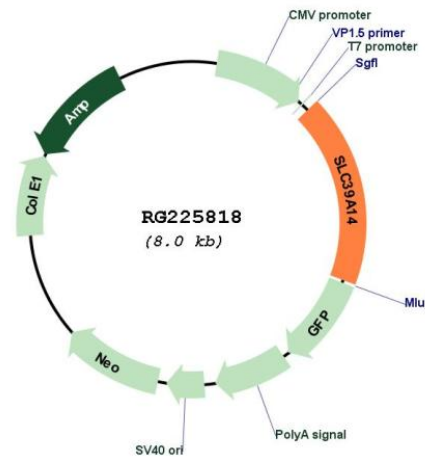
Restriction Sites:

SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001135154

ORF Size: 1443 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_001135154.3](#)

RefSeq Size: 1793 bp

RefSeq ORF: 1446 bp

Locus ID: 23516

Cytogenetics: 8p21.3

Protein Families: Transmembrane

Gene Summary: This gene encodes a member of the the SLC39A family of divalent metal transporters that mediates the cellular uptake of manganese, zinc, iron, and cadmium. The encoded protein contains eight transmembrane domains, a histidine-rich motif, and a metalloprotease motif, and is expressed on the plasma membrane and the endocytic vesicle membrane. It is an important transporter of nontransferrin-bound iron and a critical regulator of manganese homeostasis. Naturally occurring mutations in this gene are associated with neurodegeneration with brain iron accumulation and early-onset parkinsonism-dystonia with hypermanganesemia. [provided by RefSeq, May 2017]