

Product datasheet for **RG217966**

SLC39A14 (NM_015359) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SLC39A14 (NM_015359) 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:

>RG217966 representing NM_015359
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGAAGCTGCTGCTGCTGCACCCGGCCTTCCAGAGCTGCCTCCTGCTGACCTGCTTGGCTTATGGAGAA
 CCACCCCTGAGGCTCACGCTTATCCCTGGGTGCCAGCTATCAGCGCTGCCTCCTTCCTGCAGGATCT
 AATACATCGGTATGGCGAGGGTGACAGCCCACTCTGCAGCAGCTGAAGGCCCTACTCAACCACTGGAT
 GTGGGAGTGGGCCGGGTAAATGTACCCAGCACGTGCAAGGACACAGGAACCTCTCCACGTGCTTTAGTT
 CTGGAGACCTCTTCACTGCCCACAATTTAGCGAGCAGTCGCGGATTGGGAGCAGCAGCTCCAGGAGTT
 CTGCCCCACCATCTCCAGCAGCTGGATTCCCGGGCCTGCACCTCGGAGAACCAGGAAAACGAGGAGAAT
 GAGCAGACGGAGAGGGGCGGCCAAGCGCTGTTGAAGTGTGGGGCTTTGGTTTTCTCAGTGTCTCACTGA
 TTAACCTGGCCTCTCTCTGGGAGTCTCTGCTGCCCTGCACAGAGAAAGCGTTTTTCAGCCGTGTGCT
 CACTTACTTCATCGCCCTGTCCATTGGAACGCTGCTGTCTAACCGCTATTCCAGCTCATCCAGAGGCA
 TTTGGTTTTCAACCCTCTGGAAGATTATTATGTCTCCAAGTCTGCAGTGGTGTGGGGGCTTTATCTTT
 TCTTTTTACAGAGAAGATCTTGAAGATTCTTCTTAAGCAGAAAAATGAGCATCATGACACAGCCA
 TTATGCCTCTGAGTCGTTCCCTCCAAGAAGACCAGGAGGAGGGGTGATGGAGAAGCTGCAGAACGGG
 GACCTGGACCACATGATTCTCAGCACTGCAGCAGTGAAGTGGACGGCAAGGCGCCCATGGTGGACGAGA
 AGGTCAATTGTGGGCTCGCTCTCTGTGCAGGACCTGCAGGCTTCCAGAGTGTCTGCTACTGGCTGAAAGG
 TGTCCGCTACTCTGATATCGGCACTCTGGCCTGGATGATCACTCTGAGCGACGGCCTCCATAATTTATC
 GATGGCCTGGCCATCGGTGCTTCTTCACTGTGTCAAGGCTTCCAGGCTGAGCAGCTCGGTGGCCATCC
 TCTGTGAGGAGTTCCACGTGAGCTAGGAGACTTTGTCACTCTGCTCAACGCTGGGATGAGCATCCAACA
 AGCTCTCTTCTTCAACTTCTTTCTGCTGCTGCTACCTGGGCTCTGGCCTTTGGCATCTCTGGCCGGC
 AGCCACTTCTCTGCAACTGGATTTTTCGCTAGCTGGAGGAATGTTCTGTATATTTCTCTGGCTGATA
 GTTCCCTGAGATGAATGAGGTCTGTCAAGAGGATGAAAGGAAGGGCAGCATCTTGATTCCATTTATCAT
 CCAGAACCTGGGCTCTGACTGGATTACCATCATGGTGGTCTCACCATGTATTCAGGACAGATCCAG
 ATTGGG

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>RG217966 representing NM_015359
 Red=Cloning site Green=Tags(s)

MKLLLLHPAFQSCLLLTLGLWRTTPEAHASSLGAPAIASAASFLQDLIHRYGEGDSPTLQQLKALLNHL
 VGVGRGNVTQHVQGHRNLSTCFSSGDLFTAHNFSQSRIGSSELQEFCTILQQLDSRACTSENQENEEN
 EQTEEGRPSSAVEVWGFGLSVSLINLASLLGVLVLPCTEKAFFSRVLTYFIALSIGTLLSNALFQLIPEA
 FGFNPLEDYVSKSAVVFGGFYFFFTEKILKILLKQKNEHHHGHSHYASESLPSKKDQEEGVMEKLQNG
 DLDHMIPOHCSSELDGKAPMVDEKVIIVGSLSVQDLQASQSACYWLKGVRYSDIGTLAWMITLSDGLHNF
 DGLAIGASFTVSFQGISVAILCEEFPRELGDVFILLNAGMSIQQALFFNLSACCCYLGLAFGILAG
 SHFSANWIFALAGGMFLYISLADMFPENNEVCQEDERKGSILIPFIIQNLGLLTGFTIMVVLTMYSQIQ
 IG

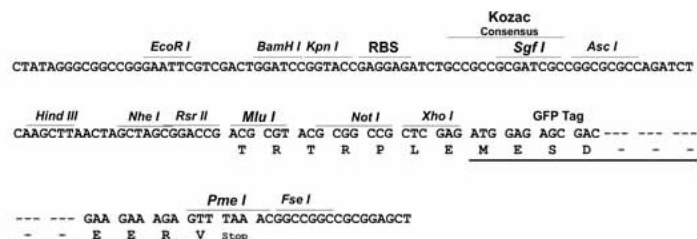
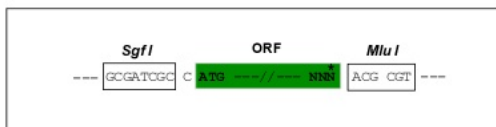
TRTRPLE – GFP Tag – V

Restriction Sites:

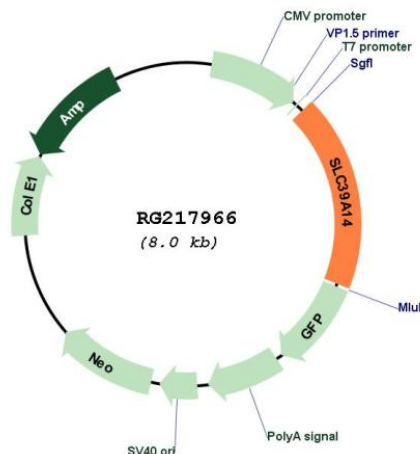
Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:



ACCN: NM_015359

ORF Size: 1476 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_015359.2](#)

RefSeq Size: 4699 bp

RefSeq ORF: 1479 bp

Locus ID: 23516

UniProt ID: [Q15043](#)

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]