

Product datasheet for **RG200938**

Transmembrane protein 93 (EMC6) (NM_031298) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Transmembrane protein 93 (EMC6) (NM_031298) Human Tagged ORF Clone
Tag: TurboGFP
Symbol: Transmembrane protein 93
Synonyms: RAB5IFL; TMEM93
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG200938 representing NM_031298
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCCGCGGTGGTGGCCAAGCGGGAAGGGCCGCGTTCATCAGCGAGGCGGCCGTGCGGGGCAACGCCG
CCGTCCTGGATTATTGCCGGACCTCGGTGTCAGCGCTGTCGGGGCCACGGCCGGCATCCTCGGCCTCAC
CGGCCTACGGCTTCATCTTCTACCTGCTCGCCTCCGTCCTGCTCTCCCTGCTCCTCATTCTCAAGGCG
GGAAGGAGGTGGAACAAATATTTCAAATCACGGAGACCTCTTTACAGGAGGCCTCATCGGGGCTCT
TCACCTACGTCCTGTTCTGGACGTTCTCTACGGCATGGTGCACGCTAC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG200938 representing NM_031298
Red=Cloning site Green=Tags(s)
MAAVVAKREGPPFISEAAVRGNAAVLDYCRTSVSALSGATAGILGLTGLYGFIFYLLASVLLSLLLILKA
GRRWNKYFKSRRPLFTGGLIGLFTYVLFWTFLYGMVHVY

TRTRPLE - GFP Tag - V

Restriction Sites: Sgfl-MluI



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Cloning Scheme:


ACCN: NM_031298

ORF Size: 330 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.

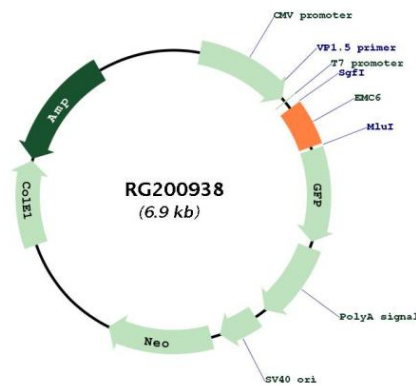
RefSeq: [NM_031298.4](#)

RefSeq Size: 692 bp

RefSeq ORF: 333 bp

Locus ID:	83460
UniProt ID:	Q9BV81
Cytogenetics:	17p13.2
Protein Families:	Transmembrane
Gene Summary:	<p>Part of the endoplasmic reticulum membrane protein complex (EMC) that enables the energy-independent insertion into endoplasmic reticulum membranes of newly synthesized membrane proteins (PubMed:30415835, PubMed:29809151, PubMed:29242231, PubMed:32459176, PubMed:32439656). Preferentially accommodates proteins with transmembrane domains that are weakly hydrophobic or contain destabilizing features such as charged and aromatic residues (PubMed:30415835, PubMed:29809151, PubMed:29242231). Involved in the cotranslational insertion of multi-pass membrane proteins in which stop-transfer membrane-anchor sequences become ER membrane spanning helices (PubMed:30415835, PubMed:29809151). It is also required for the post-translational insertion of tail-anchored/TA proteins in endoplasmic reticulum membranes (PubMed:29809151, PubMed:29242231). By mediating the proper cotranslational insertion of N-terminal transmembrane domains in an N-exo topology, with translocated N-terminus in the lumen of the ER, controls the topology of multi-pass membrane proteins like the G protein-coupled receptors (PubMed:30415835). By regulating the insertion of various proteins in membranes, it is indirectly involved in many cellular processes (Probable). [UniProtKB/Swiss-Prot Function]</p>

Product images:



Circular map for RG200938