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Product datasheet for MG203415

Emc3 (NM_175101) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Emc3 (NM_175101) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Emc3
Synonyms:	0610039A15Rik; AI225901; AW260416; Pob; Tmem111
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence:

>MG203415 representing NM_175101
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCGGGGCCCGAGCTGCTGCTTGACTCCAACATCCGCCTCTGGGTGGTCCTGCCCATCGTTATCATCA
CTTTCTTCGTGGGCATGATCCGCCACTACGTGTCAATCCTACTGCAGAGCGACAAGAAGCTCACCCAGGA
ACAAGTGTCTGACAGTCAGGTCCTAATTCGAAGCAGAGTCCTCAGGGAAAATGGAAAATACATTCCCAAG
CAGTCTTTCTTAACACGAAAATATTACTTCAACAACCCAGAGGATGGATTTTTCAAAAAAACAAAAAGGA
AGGTTGTGCCACCTTCCCCCATGACAGACCCCACCATGCTCACAGACATGATGAAAGGGAATGTCACAAA
TGTCCTCCCAATGATTCTTATCGGCGGATGGATCAACATGACGTTTTCAGGCTTTGTCACAACTAAGGTC
CCGTTTCCACTGACACTTCGCTTCAAGCCTATGCTTCAGCAAGGAATAGAGCTGCTCACACTAGACGCAT
CCTGGGTGAGTTCTGCATCCTGGTACTTCCTCAATGTGTTTGGGCTCCGGAGCATTTACTCTCTAATCCT
GGGCCAAGATAACGCCGCCGACCAGTCACGAATGATGCAGGAGCAGATGACAGGAGCAGCGATGGCCATG
CCTGCAGACACCAACAAAGCTTTCAAGACAGAGTGGGAAGCTTTGGAACTGACAGATCACCAGTGGGCGC
TCGATGATGTGGAAGAAGAACTCATGGCCAGAGACCTCCACTTTGAAGGCATGTTCAAAAAGGAACTACA
GACGTCCATATTC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

View online »

Protein Sequence:

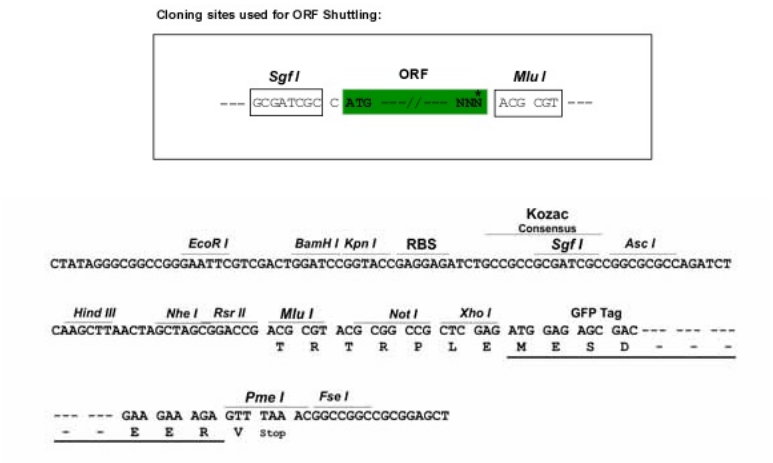
>MG203415 representing NM_175101
Red=Cloning site Green=Tags(s)

MAGPELLLDSNIRLWVVLPIVIITFFVGMIRHYVSILLQSDKKLTQEQVSDSQVLIRSRVLRENGKYIPK
QSFLTRKYYFNNPEDGFFKKTKRKVVPPSPMTDPTMLTDMMKGNVTNVLPMILIGGWINMTFSGFVTTKV
PFPLTLRFKPMLQQGIELLTLDASWVSSASWYFLNVFGLRSIYSLILGQDNAADQSRMMQEQMTGAAMAM
PADTNKAFKTEWEALELTDHQWALDDVEEELMARDLHFEGMFKKELQTSIF

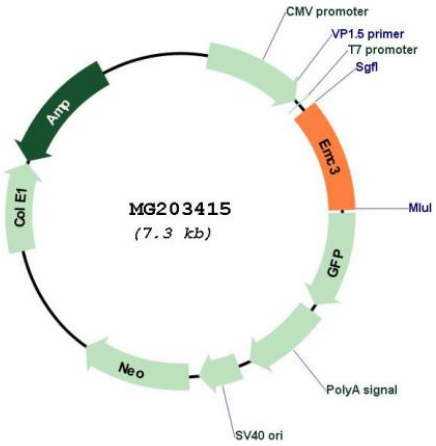
TRTRPLE – GFP Tag – V

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_175101

ORF Size: 1955 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_175101.3, NP_780310.1
RefSeq Size:	1959 bp
RefSeq ORF:	786 bp
Locus ID:	66087
UniProt ID:	Q99KI3
Cytogenetics:	6 E3
Gene Summary:	Part of the endoplasmic reticulum membrane protein complex (EMC) that enables the energy-independent insertion into endoplasmic reticulum membranes of newly synthesized membrane proteins. Preferentially accommodates proteins with transmembrane domains that are weakly hydrophobic or contain destabilizing features such as charged and aromatic residues. Involved in the cotranslational insertion of multi-pass membrane proteins in which stop-transfer membrane-anchor sequences become ER membrane spanning helices. It is also required for the post-translational insertion of tail-anchored/TA proteins in endoplasmic reticulum membranes. 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. By regulating the insertion of various proteins in membranes, it is indirectly involved in many cellular processes.[UniProtKB/Swiss-Prot Function]