

Product datasheet for **RN201813**

Emc2 (NM_001113785) Rat Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: Emc2 (NM_001113785) Rat Untagged Clone
Tag: Tag Free
Symbol: Emc2
Synonyms: RGD1310430; Ttc35
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
Fully Sequenced ORF: >RN201813 representing NM_001113785
Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGGCGAAGGTCCTGAGCGTTACGATGTGACTTGGGAAGAAATGCGAGATAAAATGAGAAAATGGCGAG
AAGAAAATCAAGAAATAGTGAACAAATATGGAAGTTGGAGAAGAAATTAATTAATGATTATGCATCTAA
GCTTGGGACGACATTTGGATCATATATGAGCAGGTGATGATTGCAGCCCTAGACTATGGTCGGGATGAC
TTGGCATTGTTTTGTCTTCAGGAGTTAAGAAGACAATTCCTGGTAGTCACAGAGTTAAGCGGTTAACGG
GAATGCGGTTTGAAGCTATGGAAGATATGATGATGCTATACAACGTATGATCGGATTTTGAAGAAGA
TCCAATAACTGCTGCCAGAAAGCGTAAGATTGCCATTCGAAAAGCCAGGGGAAAAATGTGGAGGCC
ATTCGGGAGCTGAATGAGTATCTGGAACAGTTCGTTGGAGACCAAGAAGCCTGGCATGAACCTGCAGAAC
TTTATATTAATGAGCATGACTATGCCAAAGCAGCCTTTGCTTAGAGGAGCTGATGATGACAAATCCACA
TAACCACTTGTACTGTCAACAGTACGCAGAGGTCAAATACACCAAGGTGGACTTGAAAACCTGGAGCTT
TCAAGAAAGTATTTGCACAGGCACTGAAACTCAACAACAGAAACATGAGAGCTCTGTTGGGCTTTACA
TGTCTGCAAGTCATATTGCTTCTAATCCAAAAGCAAGTGCAAAGATGAAAAAGACAACATCAGATATGC
TGGTTGGGCTGCTAATCAAATAAACAGGGCTTATCAGTTTGCAGGTGCAAGTAAGAAGGAAACCAATCC
TCTCTAAGGCAGTTGAAGACATGTTGGAGACATTGCAGATCACTCAGTCT**TAA**

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: SgfI-MluI
ACCN: NM_001113785
Insert Size: 894 bp



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OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
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:	<ol style="list-style-type: none">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:	<u>NM_001113785.1</u> , <u>NP_001107257.1</u>
RefSeq Size:	1223 bp
RefSeq ORF:	894 bp
Locus ID:	362905
UniProt ID:	<u>B0BNG0</u>
Cytogenetics:	7q31
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]