

Product datasheet for **MC223044**

Emc1 (NM_146157) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Emc1 (NM_146157) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Emc1
Synonyms:	2700016F22Rik
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>MC223044 representing NM_146157 Red=Cloning site Blue=ORF Orange=Stop codon

TTTGTAAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCGGTGCGGGTGGCGTCTGGGTTCTGGATCTGGGCTGCTGTGCTGCTCGTCCCTGCGGCCGCGGTCT
ACGAAGACCAAGTGGGCAAGTTTGACTGGAGACAGCAGTATGTTGGGAAGATCAAGTTTGCTCTTGGG
GTTTTCCCTGGATCCAAGAAGTTGGTTGTGGCCACAGAGAAGAATGTGATTGCGGCGTTAAATTCTCGG
ACTGGAGAGATCTTGTGGCGCCATGTTGACAAAGGCACAGCAGAAGGAGCTGTGGATGCCATGCTGGTCC
ATGGACAAGATGCAATCACTGTATCCAACGGAGGGCGCCTCATGCGTTCTGGGAGACCAACATCGGGG
CCTGAACCTGGGAGATAACTCTGGACACTGGCAGTTTCCAGGCACTTGGGCTAGTGGGCCTTCAGGAGTCA
GTGAGGTACATTGCAGTTCTGAAGAAGACGACCTCACCCTCCACCACCTCTCCAGTGGGCACCTGAAGT
GGGTGGAGCATCTGCCAGAAAGTGACAGCATCCTCTACCAGATGGTGTATTCTACGGCTCCGGGGTGGT
GTGGGCCCTTGGCATCGTTCCCTTCAGCCACGTGAACATCGTCAAGTTTAACGTGGAGGATGGAGAGATT
GTTTCAGCAGGTCAGGGTTTGGACTCCATGGCTGCAGCACCTCACTGGGCGCTGTGGTGTGGTAGATGAGG
CTGTCCTGGTATGCCCGACCCAGCTCACACTCACTCCACACTTTGGCCCTGGAGACGGAGTGGGAAC
GCGACAGATCCCCTGCAGTCTCCTGACTTAGAATTTGGAAGTGGATTCCAGCCCCAAGTGTGCCACA
CAACCCAGCCCAGTGGCTCCTTCTCGAGCCAGTTCTTCTGCAGTTGTCCCCAAGCCACTACGCTCTAC
TGCACTACCACCATGGTGCCGTGACTCTGCTTAAGAACTTCCCCAGGCCACGCTCGTCACTTCCGCCAC
CACAGGGGAGAAGACAGTGGCTGCAGTCATGACCTGTGCACTGAAGTGAAAAACCTGTCACTGTGGA
GATGGGTCTGTGGCAAGCTTTCCTGAGACATCTGGTGCACAGGACTCTCTGGCTTCTTCAACCAGACCT
ACACCATTAACCTGTACTTAGTGGAGACAGGTGGCGGCTCCTAGACACTTCCATTTCTTCAGCCTGGA
GCAGAAGGGCACGCGACCTGAGCAGCTGTACATCCAGGTGTTCTTGAAGAAGGACGACTCGGTGGGTAC
CGGGCCTTGGTGCAGACACAGGACCATCTGCAGCTGTTCTGCAGCAGCTTGCTGGGAAGGTGGTGTGT
GGAGCCGAGAGGAGTCCCTGGCAGAAGTCGTGTGCTGGAGATGGTGGATCTCCCCCTGACTGGAGCGCA
GGCTGAGTTGGAAGGAGAATTTGCAAGAAGGCAGCGATTCAAGATGGCTTGCTGGGGATGTTCTGAAA



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CGCCTGTCGTCCCAGCTCATCTGCTCCAGGCCTGGACTTCCCACCTCTGGAAAATGTTCTACGATGCTC
GGAAGCCCCGAAGCCAGATTAAGAATGAGATCAACATCGACACTGGCTAGAGATGAGTTCAACCTGCA
GAAAATGATGGTGACGGTAACAGCCTCAGGCAAGCTCTTTGGCATCGAGAGCAGCTCTGGAACATTCTG
TGAAGCAGTATCTGCCAATGTTAAGCCAGACTCCTCCTTTAAGCTGATGGTGCAGAGGACTACTGCCC
ATTTCCCCCATCCACCCAGTGCACGCTGCTGGTGAAGGACAAGGAGACAGGAATGAGCTCTCTGTTTGT
CTTCAACCCCATTTTTGGCAAGTGGAGCCAGGTAGCTCCCCAGTGTGAAGCGCCCATCTTGCAGTCA
CTGCTTCTCCAGTCATGGATCAAGACTATGCCAAGGTGTTGCTGTTGGTGGATGACGAATACAAGGTCA
CAGCTTTCCAGCTACGCGGAATGTCTTGCGGCAGCTGCATGAACCTGCCCCCTCCATCTTCTTCTACTT
GGTGGATGCAGAGCAGGGGCGGCTCAGTGGGTATCAGCTTCGAAAGGATCTCACTACAGAAGTGAAGTGG
GAGCTGACCATCCCCCAGAAGTGCAGCGCTCGTCAAGGTCAAGGGGAAGCGCAGCAGCGAGCAGTAC
ACTCCCAGGGCCGGGTGATGGGGGATCGAAGTGTGCTCTACAAGAGTCTGAACCCCAACTTGCTGGCCGT
GGTGACAGAGAGCAGGATGTCCACCACGAGCGCACCTTTATTGGCATCTTCTCATTGATGGTGTCACT
GGCCGCATCATCCACTCCTCCGTGCAGAAGAAGGCCAGGGGCCCTGTCCACCTTGTGCATTCAGAGAACT
GGGTGGTGTACCACTACTGGAATTCTAAGGCTCGGCGCAATGAGCTGACGGCCCTGGAGCTCTACGAGGG
CACTGAACAGTACAATGCCACTGCCTTCAGCTCTCTAGACCGACCCAGCTGCCCAAGTCTCCAGCAG
TCCTACATCTTCCCTCCTCCATCAGTGCCATGGAAGCTACCATCACCGAGAGGGGCATCACAGCCGGC
ACTTGCTCATTGGGCTGCCTTCTGGAGCAATCCTTTCCCTCCCCAAGGCCTTGCTGGATCCCCGGCGCCC
AGAGATCCCAACAGAGCAAAGCAGAGAAGAGAAGCTGATCCCATATTCTCCAGATGTTCCAGTCCATGCA
GAGCGATTCACTATAACCAGACAGTCTCTCGAATGCGAGGCATCTATACAGCGCCCTCAGGCCTGG
AGTCCACTTGTGTTGGTTGGCTACGGTTTGGATATTTACCAAAGTTCGAGTTTACCCGTCCAAGCAGTT
TGATGTCTGAAAGATGACTACGACTATGTGCTCATCAGCAGTGTCTTTTGGCCTGGTTTTGCCACC
ATGATCACAAGAGGCTGGCACAGGTGAACTCCTCAATCGAGCCTGGCGGTAA

ACGCGTACGCGCGGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites:	Sgfi-MluI
ACCN:	NM_146157
Insert Size:	2994 bp
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:	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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	<u>NM_146157.4</u> , <u>NP_666269.2</u>

RefSeq Size: 6237 bp

RefSeq ORF: 2994 bp

Locus ID: 230866

UniProt ID: [Q8C7X2](#)

Cytogenetics: 4 D3

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]

Transcript Variant: This variant (1) represents the longer transcript and encodes the longer isoform (1). Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.