

Product datasheet for MC223009

Emc1 (NM_001039200) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Emc1 (NM_001039200) 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:	>MC223009 representing NM_001039200 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCGGTGCGGGTGGCGTCTGGGTTCTGGATCTGGGCTGCTGTGCTGCTCGTCCCTGCGGCCGCGGTCT
ACGAAGACCAAGTGGCAAGTTTGACTGGAGACAGCAGTATGTTGGGAAGATCAAGTTTGCCTCCTTGG
GTTTTCCCTGGATCCAAGAAGTTGGTTGTGGCCACAGAGAAGAATGTGATTGCGGCGTTAAATTCTCG
ACTGGAGAGATCTTGTGGCGCCATGTTGACAAAGGCACAGCAGAAGGAGCTGTGGATGCCATGCTGGTCC
ATGGACAAGATGCAATCACTGTATCCAACGGAGGGCGCCTCATGCGTTCTGGGAGACCAACATCGGGG
CCTGAACCTGGGAGATAACTCTGGACACTGGCAGTTCCAGGCACTTGGGCTAGTGGGCTTCAGGAGTCA
GTGAGGTACATTGCAGTTCTGAAGAAGACGACCCTCACCTCCACCACCTCTCCAGTGGGCACCTGAAGT
GGGTGGAGCATCTGCCAGAAAGTGACAGCATCCTCTACCAGATGGTGTATTCTACGGCTCCGGGGTGGT
GTGGGCCCTTGGCATCGTTCCCTTCAGCCACGTGAACATCGTCAAGTTTAACTGGAGGATGGAGAGATT
GTTCAGCAGGTGAGGTTTGGACTCCATGGCTGCAGCACCTCACTGGGCGCTGTGGTGTGGTAGATGAGG
CTGTCTGGTATGCCCGACCCAGCTCACACTCACTCCACACTTTGGCCCTGGAGACGGAGTGGAACT
GCGACAGATCCCCTGCAGTCTCCTGACTTAGAATTTGGAAGTGGATTCCAGCCCCAAGTGTGCCACA
CAACCCAGCCAGTGGCTCCTTCTCGAGCCAGTCTTCTGCAAGTGTCCCAAGCCACTACGCTCTAC
TGCACTACCACCATGGTGCCGTGACTCTGCTTAAGAAGTTCACCCAGGCCACGCTCGTCAGCTTCGCCAC
CACAGGGGAGAAGACAGTGGCTGCAGTCATGACCTGTGCGCACTGAAGTGCAAAAACCTGTGAGTGTGGA
GATGGGCTGTGGCAAGCTTTCCTGAGACATCTGGTGCACAGGACTCTCTGGCTTCTCAACCAGACCT
ACACCATTAACCTGTAAGTGGAGACAGGTGGCGGCTCCTAGACACTTCCATTTCTTCAGCCTGGA
GCAGAAGGGCACGACCTGAGCAGCTGTACATCCAGGTGTTCTTGAAGAAGGACGACTCGGTGGGCTAC
CGGGCCTTGGTGCAGACACAGGACCATCTGCAGCTGTTCTGCAAGCAGCTTGTGGGAAGTGGTGTGT
GGAGCCGAGAGGAGTCCCTGGCAGAAGTGTGCTGGAGATGGTGGATCTCCCCCTGACTGGAGCGCA
GGCTGAGTTGGAAGGAGAATTTGCAAGAAGGCAGATGGCTTGTGGGGATGTTCTGAAACGCTGTGC



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TCCCAGCTCATCCTGCTCCAGGCCTGGACTTCCCACCTCTGGAAAATGTTCTACGATGCTCGGAAGCCCC
 GAAGCCAGATTAAGAATGAGATCAACATCGACACACTGGCTAGAGATGAGTTCAACCTGCAGAAAATGAT
 GGTGACGGTAACAGCCTCAGGCAAGCTCTTTGGCATCGAGAGCAGCTCTGGAACCATTCTGTGGAAGCAG
 TATCTGCCCAATGTTAAGCCAGACTCCTCCTTTAAGCTGATGGTGCAGAGGACTACTGCCATTTCCCC
 ATCCACCCAGTGCACGCTGCTGGTGAAGGACAAGGAGACAGGAATGAGCTCTCTGTTTGTCTTCAACCC
 CATTTTTGGCAAGTGGAGCCAGGTAGCTCCCCAGTGTGAAGCGCCCCATCTTGCGAGTCACTGCTTCTC
 CCAGTCATGGATCAAGACTATGCCAAGGTGTTGCTGTTGGTGGATGACGAATACAAGGTCACAGCTTCC
 CAGCTACGCGGAATGTCTTGCAGCAGCTGCATGAACTTGCCCCCTCCATCTTCTTACTTGGTGGATGC
 AGAGCAGGGGCGGCTCAGTGGGTATCAGCTTCAAAGGATCTCACTACAGAACTGAGTTGGGAGCTGACC
 ATCCCCCAGAAGTGCAGCGCGTCGTAAGGTCAAAGGGAAGCGCAGCAGCGAGCACGTACACTCCCAGG
 GCCGGGTGATGGGGATCGAAGTGTGCTCTACAAGAGTCTGAACCCCACTTGCTGGCCGTGGTACAGA
 GAGCACGGATGTCCACCAGAGCGCACCTTTATTGGCATCTTCTCATTGATGGTGTCACTGGCCGCATC
 ATCCACTCCTCCGTGCAGAAGAAGGCCAGGGGCCCTGTCCACCTGTGCATTAGAGAACTGGTGGTGT
 ACCAGTACTGGAATTCTAAGGCTCGGCCAATGAGCTGACGGCCCTGGAGCTCTACGAGGCACTGAACA
 GTACAATGCCACTGCCTCAGCTCTTAGACCGACCCAGCTGCCCCAGGTCCTCCAGCAGTCTACATC
 TTCCCCTCCTCCATCAGTGCCATGGAAGCTACCATCACCGAGAGGGGCATCACCGCCGGCACTTGCTCA
 TTGGGCTGCCTTCTGGAGCAATCCTTTCCCTCCCCAAGGCCTTGCTGGATCCCCGGCGCCAGAGATCCC
 AACAGAGCAAAGCAGAGAAGAGAACCTGATCCCATATTCTCCAGATGTTCAAGTCCATGCAGAGCGATT
 ATCAACTATAACCAGACAGTCTCTCGAATGCGAGGCATCTATACAGCGCCCTCAGGCCTGGAGTCCACT
 GTTTGGTTGTGGCCTACGGTTTGGATATTTACCAAACCGAGTTTACCCGTCCAAGCAGTTTGTATGCTCT
 GAAAGATGACTACGACTATGTGCTCATCAGCAGTGTCTTTTTGGCCTGGTTTTTGCACCATGATCACA
 AAGAGGCTGGCACAGGTGAACTCCTCAATCGAGCCTGGCGGTAA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

- Restriction Sites:** SgfI-MluI
- ACCN:** NM_001039200
- Insert Size:** 2985 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.
- RefSeq:** [NM_001039200.2](#), [NP_001034289.1](#)
- RefSeq Size:** 6228 bp
- RefSeq ORF:** 2985 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 (2) lacks an alternate in-frame exon in the 5' coding region, compared to variant 1. It encodes isoform 2 which is shorter than 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.