

Product datasheet for **RC208885**

EMG1 (NM_006331) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	EMG1 (NM_006331) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	EMG1
Synonyms:	C2F; Grcc2f; NEP1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC208885 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCCGCGCCAGTGATGGATTCAAGCCTCGTGAACGAAGCGGTGGGAGCAGGCACAGGACTGGGATG
CTCTGCCACCCAAGCGGCCCGACTAGGGGCAGGAAACAAGATCGGAGGCCGTAGGCTTATTGTGGTGCT
GGAAGGGCCAGTCTGGAGACAGTCAAGGTAGGGAAGACATATGAGCTACTCAACTGTGACAAGCACAAG
TCTATATTGTTGAAGAATGGACGGGACCCTGGGAAGCGCGCCAGATATCACCCACCAGAGTTTGTCTGA
TGCTGATGGATAGTCCCCTGAACCGAGCTGGCTTGCTACAGGTTTATATCCATACACAGAAGAATGTTCT
GATTGAAGTGAATCCCCAGACCCGAATCCAGAACCTTTGACCGCTTTTGTGGCCTCATGGTTCAACTT
TTACACAAGCTCAGTGTTTCGAGCAGCTGATGGCCCCAGAAGCTTTTGAAGGTAATTAAGAATCCAGTAT
CAGATCACTTTCCAGTTGGATGTATGAAAGTTGGCACTTCTTTTCCATCCCGGTTGTCAGTGATGTGCG
TGAGCTGGTGCCAGCAGTGATCCTATTGTTTTGTGGTAGGGGCTTTGCCCATGGCAAGGTCAGTGTG
GAGTATACAGAGAAGATGGTGTCCATCAGTAACCTACCCCTTTCTGCTGCCCTCACCTGTGCAAACTTA
CCACAGCCTTTGAGGAAGTATGGGGGTCATT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC208885 protein sequence
 Red=Cloning site Green=Tags(s)

MAAPSDGFKPRERSGGEQAQDWDALPPKRPRLGAGNKIGRRLLIVVLEGASLETVKVGKTYELLNCDKHK
 SILLKNGRDPGEARPDITHQSLMLMDSPLNRAGLLQVYIHTQKNVLEIVNPQTRIPRTFDRFCGLMVQL
 LHKLSVRAADGPQKLLKVIKNPVSDFHPVCGMKVGTFSFSIPVVSVDVRELVPSSDPVIVFVVGAFAHGKVSV
 EYTEKMVSI SNYPLSAALTCAKLTTAFEEVWGI

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6035_c02.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_006331

ORF Size: 732 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_006331.8](#)

RefSeq Size: 1072 bp

RefSeq ORF: 735 bp

Locus ID: 10436

UniProt ID: [Q92979](#)

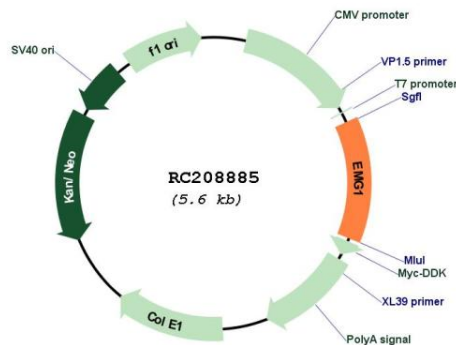
Cytogenetics: 12p13.31

Domains: Mra1

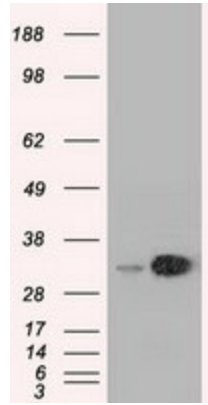
MW: 26.7 kDa

Gene Summary: This gene encodes an essential, conserved eukaryotic protein that methylates pseudouridine in 18S rRNA. The related protein in yeast is a component of the small subunit processome and is essential for biogenesis of the ribosomal 40S subunit. A mutation in this gene has been associated with Bowen-Conradi syndrome. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Feb 2016]

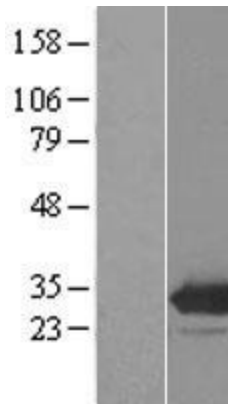
Product images:



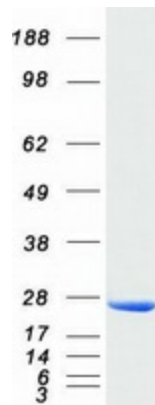
Circular map for RC208885



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY EMG1 (Cat# RC208885, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-EMG1 (Cat# [TA501209]). Positive lysates [LY401906] (100ug) and [LC401906] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY401906]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC208885 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified EMG1 protein (Cat# [TP308885]). The protein was produced from HEK293T cells transfected with EMG1 cDNA clone (Cat# RC208885) using MegaTran 2.0 (Cat# [TT210002]).