

Product datasheet for **MR226885**

Epo (NM_007942) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Epo (NM_007942) Mouse Tagged ORF Clone
Tag: Myc-DDK
Symbol: Epo
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >MR226885 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGGGGTGCCCGAACGTCCCACCCTGCTGCTTTACTCTCCTTGCTACTGATTCTCTGGGCCTCCAG
TCCTCTGTGCTCCCCACGCCTCATCTGCGACAGTCGAGTTCTGGAGAGGTACATCTTAGAGGCCAAGGA
GGCAGAAAATGTCACGATGGGTTGTGCAGAAGTCCCAGACTGAGTGAAAATATTACAGTCCCAGATACC
AAAGTCAACTTCTATGCTTGGAAAAGAAATGGAGGTGGAAGAACAGGCCATAGAAGTTTGGCAAGGCCTGT
CCCTGCTCAGAAAGCCATCCTGCAGGCCCAGGCCCTGCTAGCCAATTCCTCCAGCCACAGAGACCCT
TCAGCTTCATATAGACAAAGCCATCAGTGGTCTACGTAGCCTCACTTCACTGCTTCGGGTACTGGGAGCT
CAGAAGGAATTGATGTCGCCTCCAGATACCACCCACCTGCTCCACTCCGAACACTCACAGTGGATACTT
TCTGCAAGCTCTCCGGGTCTACGCCAACTTCTCCGGGGGAACTGAAGCTGTACACGGGAGAGGTCTG
CAGGAGAGGGGACAGG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR226885 protein sequence
Red=Cloning site Green=Tags(s)

MGVPERPTLLLLLISLLIPLGLPVLCAAPPRLICDSRVLERYILEAKEAENVTMGCAEGPRLSENITVPDT
KVNIFYAWKRMEVEEQAIIEVWQGLSLLSEAILQAQALLANSSQPPETLQLHIDKAIISGLRSLTSLRLVGA
QKELMSPDTPPAPLRTLTVDTFCKLFRVYANFLRGKCLKLYTGEVCRRGDR

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI



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Cloning Scheme:



ACCN: NM_007942

ORF Size: 576 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_007942.2](#), [NP_031968.1](#)

RefSeq Size: 715 bp

RefSeq ORF: 579 bp

Locus ID: 13856

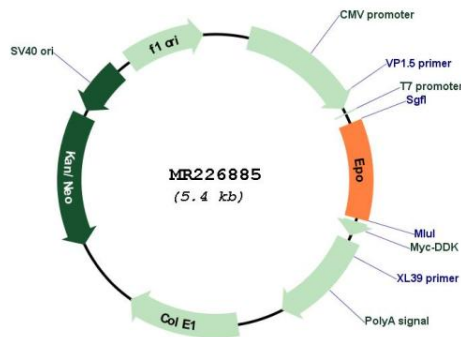
UniProt ID: [P07321](#)

Cytogenetics: 5 76.5 cM

MW: 21.4 kDa

Gene Summary: This gene encodes the glycoprotein hormone erythropoietin that regulates the production of red blood cells and biosynthesis of hemoglobin. The predominant expression of this gene shifts from the liver during fetal development to kidney in adults. A complete lack of the encoded protein causes embryonic lethal anemia in mice. The conditional inactivation of this gene in adult mice results in a chronic, normocytic and normochromic anemia. Transgenic mice expressing the human ortholog of this gene exhibit polycythemia. Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Aug 2015]

Product images:



Circular map for MR226885