

Product datasheet for **RC223190**

PEAMT (PEMT) (NM_007169) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: PEAMT (PEMT) (NM_007169) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: PEAMT
Synonyms: PEAMT; PEMPT; PEMT2; PLMT; PNMT
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC223190 representing NM_007169
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGACCCGGCTGCTGGGCTACGTGGACCCCTGGATCCCAGCTTTGTGGCTGCCGTCATCACCATCACCT
 TCAATCCGCTCTACTGGAATGTGGTTGCACGATGGGAACACAAGACCCGCAAGCTGAGCAGGGCCTTCGG
 ATCCCCCTACCTGGCCTGCTACTCTCTAAGCGTCACCATCCTGCTCCTGAACTTCTGCGCTCGCACTGC
 TTCACGCAGGCCATGCTGAGCCAGCCAGGATGGAGAGCCTGGACACCCCGGGCTACAGCCTGGGCC
 TCGCGCTCCTGGGACTGGGCGTCTGCTCGTCTCCAGCTTCTTTGCACTGGGGTTCGCTGGAACCTT
 CCTAGGTGATTACTTCGGGATCCTCAAGGAGGCGAGAGTGACCGTGTCCCTTCAACATCCTGGACAAC
 CCCATGTACTGGGAAGCACAGCAACTACCTGGGCTGGGCCATCATGCACGCCAGCCCCACGGGCTGC
 TCCTGACGGTGTGGTGGCCCTCACCTACATAGTGGCTCTCTATACGAAGAGCCCTTACCCTGAGAT
 CTACCGGCAGAAAGCCTCCGGGTCCCACAAGAGGAGC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC223190 representing NM_007169
 Red=Cloning site Green=Tags(s)

MTRLLGYVDPLDPSFVAAVITITFNPLYWNVVARWEHKTRKLSRAFGSPYLACYSLSVTILLNFLRSHC
 FTQAMLSQPRMESLDTAAAYSLGLALLGLGVVLVLSFFALGFAGTFLGDYFGILKEARVTFPFNILDN
 PMYWGSTANYLGWAIMHASPTGLLLTLVLTVALTYIVALLYEEPFTAETIYRQKASGSHKRS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

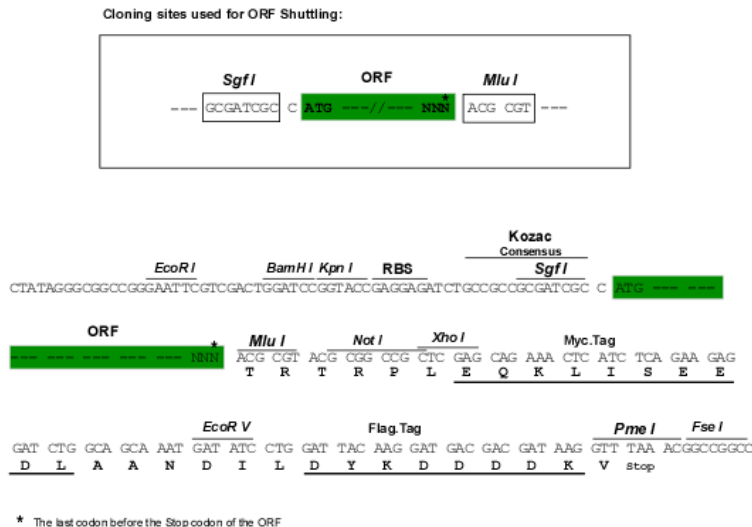


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Chromatograms: https://cdn.origene.com/chromatograms/mg3644_e03.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_007169

ORF Size: 597 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_007169.3](#)

RefSeq Size: 1008 bp

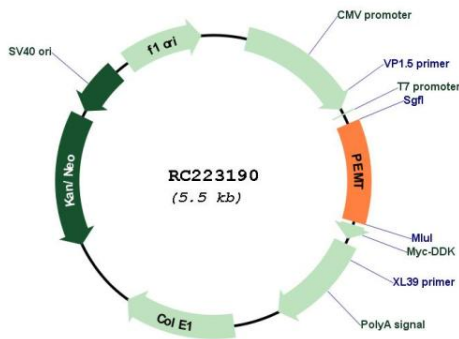
RefSeq ORF: 600 bp

Locus ID: 10400

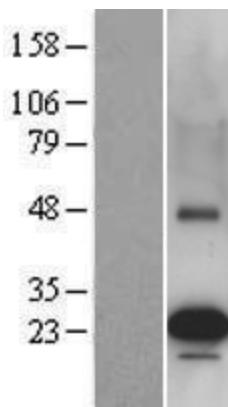
UniProt ID: [Q9UBM1](#)
 Cytogenetics: 17p11.2
 Domains: PEMT
 Protein Families: Transmembrane
 Protein Pathways: Glycerophospholipid metabolism, Metabolic pathways
 MW: 22 kDa

Gene Summary: Phosphatidylcholine (PC) is the most abundant mammalian phospholipid. This gene encodes an enzyme which converts phosphatidylethanolamine to phosphatidylcholine by sequential methylation in the liver. Another distinct synthetic pathway in nucleated cells converts intracellular choline to phosphatidylcholine by a three-step process. The protein isoforms encoded by this gene localize to the endoplasmic reticulum and mitochondria-associated membranes. Alternate splicing of this gene results in multiple transcript variants encoding different isoforms. [provided by RefSeq, May 2012]

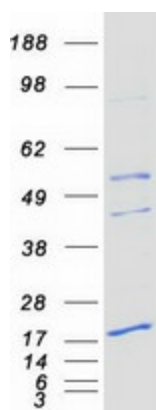
Product images:



Circular map for RC223190



Western blot validation of overexpression lysate (Cat# [LY402097]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC223190 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified PEMT protein (Cat# [TP323190]). The protein was produced from HEK293T cells transfected with PEMT cDNA clone (Cat# RC223190) using MegaTran 2.0 (Cat# [TT210002]).