

Product datasheet for **RC200327**

PCMT1 (NM_005389) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PCMT1 (NM_005389) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PCMT1
Synonyms:	PIMT
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC200327 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCC**CGATCGCC**

ATGGCCTGGAAATCCGGCGGCCAGCCACTCGGAGCTAATCCACAATCTCCGAAAAATGGAATCATCAAGACAGATAAAGTATTTGAAGTGATGCTGGCTACAGACCGCTCCCACTATGCAAAATGTAACCCATACATGGATTCTCCACAATCAATAGGTTTCCAAGCAACAATCAGTGCTCCACACATGCATGCATATGCGCTAGAACTTCTATTTGATCAGTTGCATGAAGGAGCTAAAGCTCTTGATGTAGGATCTGGAAGTGAATCCTTACTGCATGTTTTGCACGTATGGTTGGATGTAAGTGGAAAAGTCATAGGAATTGATCACATTAAGAGCTAGTAGATGACTCAATAAATAATGTCAGGAAGGACGATCCAACACTTCTGTCTTCAGGGAGAGTACAGCTTGTGTGGGGATGGAAGAATGGGATATGCTGAAGAAGCCCTTATGATGCCATTATGTGGGAGCTGCAGCCCTGTTGTACCCAGGCGCTAATAGATCAGTTAAAGCCGGAGGAAGATTGATATTGCCTGTTGGTCTGCAGGCGGAAACCAAAATGTTGGAGCAGTATGACAAGCTACAAGATGGCAGCATCAAAATGAAGCCTCTGATGGGGTGATATACGTGCCTTTAACAGATAAAGAAAAGCAGTGGTCCAGGTGGAAG

ACGCGTACGCGGCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATTACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC200327 protein sequence
 Red=Cloning site Green=Tags(s)

MAWKSGGASHSELIHNLKNGIIKTDKVFVEMLATDRSHYAKCNPYMDSPQSIGFQATISAPMHAYALE
 LLFDQLHEGAKALDVGSGSGILTACFARMVGTGKVIKIDHIKELVDDSIINNVRKDDPTLLSSGRVQLVV
 GDGRMGYAEAPYDAIHVGAAAPVVPQALIDQLKPGGRLILPVGPAAGNQMLEQYDKLQDGSIKMKPLMG
 VIYVPLTDEKQWSRWK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6408_a12.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_005389

ORF Size: 681 bp

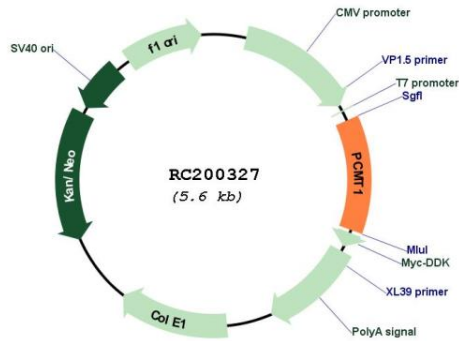
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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.

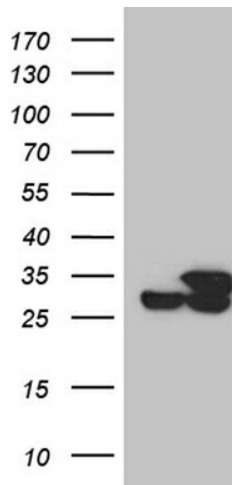
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:	<ol style="list-style-type: none">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_005389.1</u> , <u>NP_005380.1</u>
RefSeq Size:	1751 bp
RefSeq ORF:	858 bp
Locus ID:	5110
UniProt ID:	<u>P22061</u>
Cytogenetics:	6q25.1
Domains:	PCMT
Protein Families:	Druggable Genome
MW:	24.7 kDa
Gene Summary:	This gene encodes a member of the type II class of protein carboxyl methyltransferase enzymes. The encoded enzyme plays a role in protein repair by recognizing and converting D-aspartyl and L-isoaspartyl residues resulting from spontaneous deamidation back to the normal L-aspartyl form. The encoded protein may play a protective role in the pathogenesis of Alzheimer's disease, and single nucleotide polymorphisms in this gene have been associated with spina bifida and premature ovarian failure. Alternatively spliced transcript variants encoding multiple isoforms have been observed for this gene. [provided by RefSeq, Oct 2011]

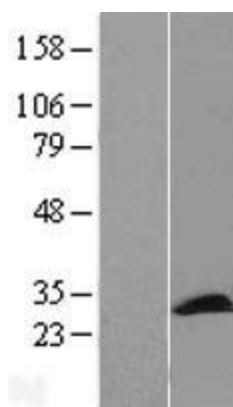
Product images:



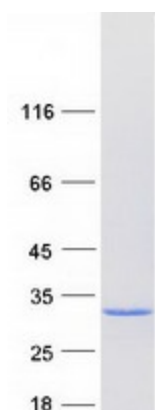
Circular map for RC200327



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY PCMT1 (Cat# RC200327, 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-PCMT1 (Cat# [TA809966])(1:2000). Positive lysates [LY432164] (100ug) and [LC432164] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY417343]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC200327 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified PCMT1 protein (Cat# [TP300327]). The protein was produced from HEK293T cells transfected with PCMT1 cDNA clone (Cat# RC200327) using MegaTran 2.0 (Cat# [TT210002]).