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Product datasheet for RC209009

PM20D1 (NM_152491) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PM20D1 (NM_152491) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PM20D1
Synonyms:	Cps1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

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ORF Nucleotide Sequence:

>RC209009 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCTCAGCGGTGCGTTTGCGTGCTGGCCCTGGTGGCTATGCTGCTCCTAGTTTTCCCTACCGTCTCCA
GATCGATGGGCCCGAGGAGCGGGGAGCATCAAAGGGCGTCGCGAATCCCTTCTCAGTTCAGCAAAGAGGA
ACGCGTCGCGATGAAAGAGGCGCTGAAAGGTGCCATCCAGATTCCAACAGTGACTTTTAGCTCTGAGAAG
TCCAATACTACAGCCCTGGCTGAGTTCGGAAAATACATTCATAAAGTCTTTCCTACAGTGGTCAGCACCA
GCTTTATCCAGCATGAAGTCGTGGAAGAGTATAGCCACCTGTTCACTATCCAAGGCTCGGACCCCAGCTT
GCAGCCCTACCTGCTGATGGCTCACTTTGATGTGGTGCCTGCCCCTGAAGAAGGCTGGGAGGTGCCCCCA
TTCTCTGGGTTGGAGCGTGATGGCGTCATCTATGGTTGGGGCACACTGGACGACAAGAACTCTGTGATGG
CATTACTGCAGGCCTTGGAGCTCCTGCTGATCAGGAAGTACATCCCCCGAAGATCTTTCTTCATTTCTCT
GGGCCATGATGAGGAGTCATCAGGGACAGGGGCTCAGAGGATCTCAGCCCTGCTACAGTCAAGGGGCGTC
CAGCTAGCCTTCATTGTGGACGAGGGGGGCTTCATCTTGGATGATTTCATTCCTAACTTCAAGAAGCCCA
TCGCCTTGATTGCAGTCTCAGAGAAGGGTTCCATGAACCTCATGCTGCAAGTAAACATGACTTCAGGCCA
CTCTTCAGCTCCTCCAAAGGAGACAAGCATTGGCATCCTTGCAGCTGCTGTCAGCCGATTGGAGCAGACA
CCAATGCCTATCATATTTGGAAGCGGGACAGTGGTGACTGTATTGCAGCAACTGGCAAATGAGTTTCCCT
TCCCTGTCAATATAATCCTGAGCAACCCATGGCTATTTGAACCACTTATAAGCAGGTTTATGGAGAGAAA
TCCCTTAACCAATGCAATAATCAGGACCACCACGGCACTCACCATATTCAAAGCAGGGGTCAAGTTCAAT
GTCATCCCCCCAGTGGCCCAGGCCACAGTCAACTTCCGGATTCACCCTGGACAGACAGTCCAAGAGGTCC
TAGAACTCACGAAGAACATTGTGGCTGATAACAGAGTCCAGTTCCATGTGTTGAGTGCCTTTGACCCCCT
CCCCGTCAGCCCTTCTGATGACAAGGCCTTGGGCTACCAGCTGCTCCGCCAGACCGTACAGTCCGTCTTC
CCGGAAGTCAATATTACTGCCCCAGTTACTTCTATTGGCAACACAGACAGCCGATTCTTTACAAACCTCA
CCACTGGCATCTACAGGTTCTACCCCATCTACATACAGCCTGAAGACTTCAAACGCATCCATGGAGTCAA
CGAGAAAATCTCAGTCCAAGCCTATGAGACCCAAGTGAAATTCATCTTTGAGTTGATTCAGAATGCTGAC
ACAGACCAGGAGCCAGTTTCTCACCTGCACAAACTG

AGCGGACCGACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC
TGGATTACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC209009 protein sequence
Red=Cloning site Green=Tags(s)

MAQRCVCVLALVAMLLLVFPTVSRSMGPRSGEHQRASRIPSQFSKEERVAMKEALKGAIQIPTVTFSSEK
SNTTALAEFGKYIHKVFPTVVSTSFIQHEVVEEYSHLFTIQGSDPSLQPYLLMAHFDVVPAPEEGWEVPP
FSGLERDGVIYGWGTLDDKNSVMALLQALELLLIRKYIPRRSFFISLGHDEESSGTGAQRISALLQSRGV
QLAFIVDEGGFILDDFIPNFKKPIALIAVSEKGSMNLMLQVNMTSGHSSAPPKETSIGILAAAVSRLEQT
PMPIIFGSGTVVTVLQQLANEFPFPVNIILSNPWLFEPLISRFMERNPLTNAIIRTTTALTIFKAGVKFN
VIPPVAQATVNFRIHPGQTVQEVLELTKNIVADNRVQFHVLSAFDPLPVSPSDDKALGYQLLRQTVQSVF
PEVNITAPVTSIGNTDSRFFTNLTTGIYRFYPIYIQPEDFKRIHGVNEKISVQAYETQVKFIFELIQNAD
TDQEPVSHLHKL

SGPTRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6620_c03.zip

Restriction Sites: SgfI-RsrII

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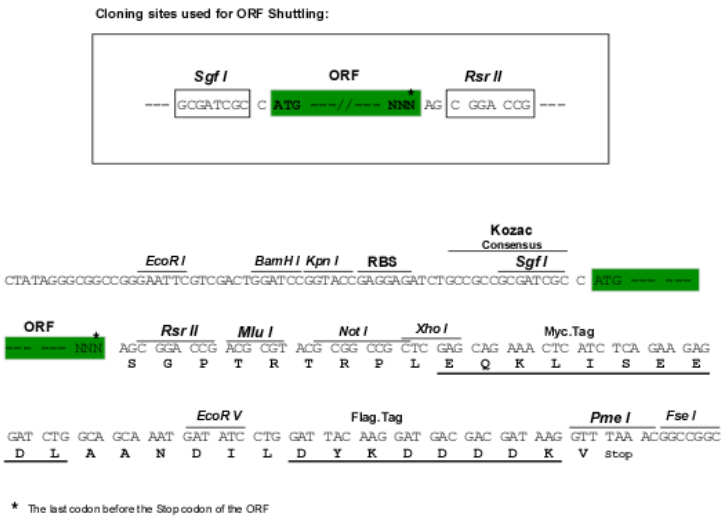
Cloning Scheme:



ACCN: NM_152491

ORF Size: 1506 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_152491.2

RefSeq Size: 2200 bp

RefSeq ORF: 1509 bp

Locus ID: 148811

UniProt ID: Q6GTS8

Cytogenetics: 1q32.1

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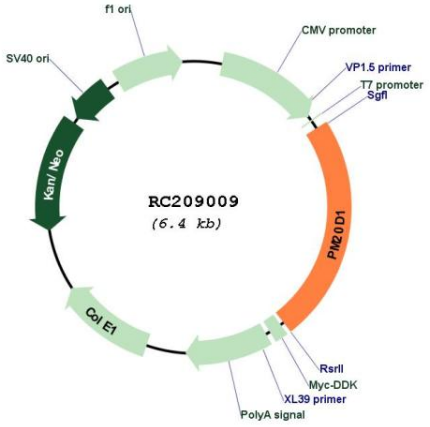
Protein Families: Transmembrane

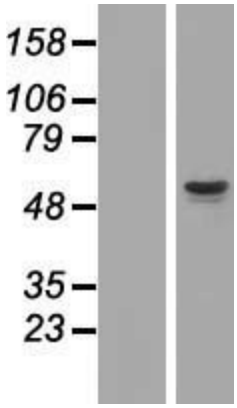
MW: 55.8 kDa

Gene Summary: Bidirectional N-fatty-acyl amino acid synthase/hydrolase that regulates the production of N-fatty-acyl amino acids. These metabolites are endogenous chemical uncouplers of mitochondrial respiration. In an UCP1-independent manner, maybe through interaction with mitochondrial transporters, they promote proton leakage into the mitochondrial matrix. Thereby, this secreted protein may indirectly regulate the bodily dissipation of chemical energy as heat through thermogenic respiration.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RC209009



Western blot validation of overexpression lysate (Cat# [LY407498]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC209009 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).

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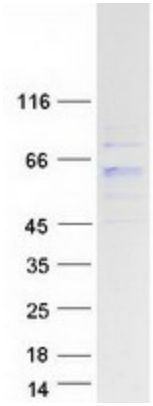

Coomassie blue staining of purified PM20D1 protein (Cat# [TP309009]). The protein was produced from HEK293T cells transfected with PM20D1 cDNA clone (Cat# RC209009) using MegaTran 2.0 (Cat# [TT210002]).

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