

## Product datasheet for **RG209009**

### PM20D1 (NM\_152491) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	PM20D1 (NM_152491) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	PM20D1
Synonyms:	Cps1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>RG209009 representing NM\_152491  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGCTCAGCGGTGCGTTTTCGCTGCTGGCCCTGGTGGCTATGCTGCTCCTAGTTTTCCCTACCGTCTCCA  
 GATCGATGGGCCCGAGGAGCGGGAGCATCAAAGGGCGTCGCAATCCCTTCTCAGTTTCAGCAAAGAGGA  
 ACGCGTCGCGATGAAAGAGGCGCTGAAAGGTGCCATCCAGATTCCAACAGTGACTTTTAGCTCTGAGAAG  
 TCCAATACTACAGCCCTGGCTGAGTTCGGAAAATACATTCATAAAGTCTTTCCTACAGTGGTCAGCACCA  
 GCTTTATCCAGCATGAAGTCGTGGAAGAGTATAGCCACCTGTTCACTATCCAAGGCTCGGACCCAGCTT  
 GCAGCCCTACCTGCTGATGGCTCACTTTGATGTGGTGCCTGCCCTGAAGAAGGCTGGGAGGTGCCCCCA  
 TTCTCTGGGTTGGAGCGTATGGCGTCATCTATGGTTGGGGCACACTGGACGACAAGAAGTCTGTGATGG  
 CATTACTGCAGGCCTTGGAGCTCCTGCTGATCAGGAAGTACATCCCCGAAGATCTTCTTCATTTCTCT  
 GGGCCATGATGAGGAGTCATCAGGGACAGGGGCTCAGAGGATCTCAGCCCTGCTACAGTCAAGGGGCGTC  
 CAGCTAGCCTTCAATTGTGGACGAGGGGGCTTCATCTTGATGATTTTCCTAACTTCAAGAAGCCCA  
 TCGCCTTGATTGCAGTCTCAGAGAAGGGTTCATGAACCTCATGCTGCAAGTAAACATGACTTCAGGCCA  
 CTCTTCAGCTCCTCAAAGGAGACAAGCATTGGCATCCTTGCAGCTGCTGTGAGCCGATTGGAGCAGACA  
 CCAATGCCTATCATATTTGGAAGCGGGACAGTGGTACTGATTGCGCAACTGGCAAATGAGTTTCCCT  
 TCCCTGTCAATATAATCTGAGCAACCCATGGCTATTTGAACCACTTATAAGCAGGTTTATGGAGAGAAA  
 TCCCTTAACCAATGCAATAATCAGGACCACCGGCACTACCATATTCAAAGCAGGGGTCAAGTTCAT  
 GTCATCCCCCAGTGGCCAGGCCACAGTCAACTCCGGATTACCCTGGACAGACAGTCCAAGAGGTC  
 TAGAATCACGAAGAACATTGTGGCTGATAACAGAGTCCAGTTCATGTGTTGAGTGCCTTTGACCCCT  
 CCCCCTCAGCCCTTCTGATGACAAGGCCTTGGGCTACCAGCTGCTCCGCCAGCCGTACAGTCCGCTTTC  
 CCGGAAGTCAATATTACTGCCCCAGTACTTCTATTGGCAACACAGACAGCCGATTCTTTACAAACCTCA  
 CCACTGGCATCTACAGGTTCTACCCATCTACATACAGCCTGAAGACTTCAAACGCATCCATGGAGTCAA  
 CGAGAAAATCTCAGTCCAAGCCTATGAGACCCAAGTGAATTCATCTTTGAGTTGATTGAGAATGCTGAC  
 ACAGACCAGGAGCCAGTTTCTCACCTGCACAACTG

AG**CGGACCG**ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

**Protein Sequence:**

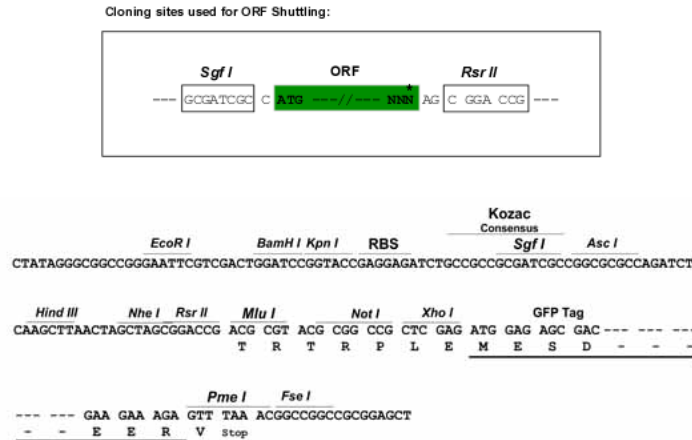
>RG209009 representing NM\_152491  
 Red=Cloning site Green=Tags(s)

MAQRVCVVLALVAMLLLVFPTVSRSMGPRSGEHQRASRIPSQFSKEERVAMKEALKGAIQIPTVTFSSSEK  
 SNTTALAEFGKYIHKVFPTVVSTSFIQHEVVEEYSHLFTIQGSDPSLQPYLLMAHFDVVPAPEEGWEVPP  
 FSGLERDGVYIYWGTLDDKNSVMALLQALELLLIRKYIPRRSFFISLGHDEESSGTGAQRISALLQSRGV  
 QLAFIVDEGGFILDFFIPNFKKPIALIAVSEKGSMLMLQVNMNTSGHSSAPPKETSIGILAAVSRLEQT  
 PMPPIIFGSGTVVTVLQQLANEFPPVNIILSNPWLFEPLISRFMERNPLTNAIIRTTTALTIFKAGVKFN  
 VIPPVAQATVNFRIHPGQTVQEVLELTKNIVADNRVQFHVLSAFDPLPVSPSDDKALGYQLLRQTVQSVF  
 PEVNITAPVTSIGNTDSRFFTNLTGTYRFYPIYIQPEDFKRIHGVNEKISVQAYETQVKFIFELIQNAD  
 TDQEPVSHLHKL

SGP**TRRRLE** – GFP Tag – V

**Restriction Sites:**

Sgfl-RsrII

**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:** 2265 bp

**RefSeq ORF:** 1509 bp

**Locus ID:** 148811

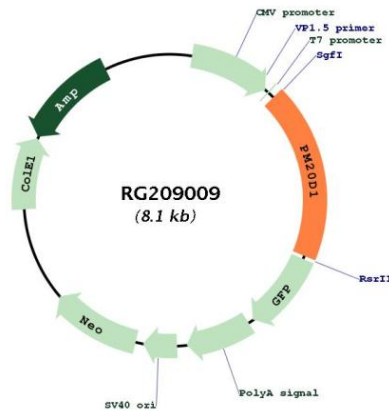
**UniProt ID:** [Q6GTS8](#)

**Cytogenetics:** 1q32.1

**Protein Families:** Transmembrane

**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 RG209009