

## Product datasheet for **MR216980**

### **Pm20d1 (NM\_178079) Mouse Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Pm20d1 (NM_178079) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Pm20d1
Synonyms:	4732466D17Rik; AI098026
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>MR216980 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**GCGATCGCC**

ATGGCTGAGCTACTTGCTAGCTTCCCCGCCTGGCAGCTGTGCTCCTTCTTTTTTCGCTACGGTCTCCG  
 GATCCACTGGCCCTAGAAGCAGGAAAAATCGGGGGCGTCCCGGATCCCTTCCCAGTTACAGCAGGAGGA  
 CGGTGTCGCTATAAAGAGGCGCTGAAAGGTGCCATCCAGATTCCACAGTGTCTTTACGCCACGAGGAA  
 TCCAACACCACAGCCCTTGCTGAGTTTGGAGAATATATCCGAAAGCCTTCCCTACAGTGTTCACAGCA  
 GCCTTGTCCAACATGAAGTCGTGGCAAAGTATAGCCACCTGTTACCATCCAAGGCTCAGACCCAGTTT  
 GCAGCCCTACATGCTGATGGCTCACATTGATGTGGTTCCTGCCCCGGAAGAAGGATGGGAGGTGCCCCG  
 TTCTCAGGCTGGAACGCAATGGCTTCATCTATGGCCGGGTGCGCTGGACAACAAAACTCTGTGATGG  
 CGATCCTGCATGCTTTGGAGCTCCTGTTGATCAGAACTACAGCCCCAAAAGATCTTTCTTATTGCTTT  
 GGCCATGATGAGGAGGTGCCGGGAAAAGGGGCTCAGAAGATCTCAGCACTTTACAGGCAAGGGGT  
 GTCAGCTAGCCTTCTTGTGGATGAAGGGAGCTTTATCTTGAAGGCTTCATTCCAACCTCGAGAAGC  
 CAGTTGCCATGATTTAGTCACTGAGAAGGGTGCCTTGACCTCATGCTGCAAGTAAACATGACTCCAGG  
 CCACTTTCAGCTCCCCAAAGGAGACAAGCATTGGCATTCTTTCTGCCGCTGTGAGCCGACTGGAGCAG  
 ACACCAATGCCGAATATGTTTGGAGGAGGGCCATTGAAGAAGACAATGAAGCTACTGGCAAATGAGTTTT  
 CCTTCCATCAATATAGTCTTGAGAACTGTGGCTATTTTATCCCATTGTGAGCAGGATAATGGAGAG  
 GAACCCATAACAAATGCGCTGGTCCGAACACACAGCCCTCACCATGTTCAATGCAGGAATCAAGGTG  
 AATGTCATCCCTCATTGGCTCAGGCTACAATCAACTGCCGAATCACCCCTCGCAGACAGTACATGAGG  
 TCCTAGAACTTGTCAAGAACACCGTGGCTGATGACAGAGTCCAGCTGCATGTGTTGAGATCCTTTGAAC  
 CCTGCCCATCAGCCCTCTGATGACCAGGCCATGGGCTACCAGCTGCTTCAAGAGACCATACGATCTGTC  
 TCCCCGGAAGTCGACATCGTCTGCCCGGTATTTGATTGCAATACGGACACCCGACACTATGCCAACA  
 TCACCAATGGCATGTACCGTTCAACCCCTTCCCCTGAACCCTCAGGACTTCAGTGGTGTCCATGGAAT  
 CAATGAGAAAGTTTCCGTTCAGAACTACCAGAACCAGGTGAAGTTCATCTTTGAGTTCATCCAAAATGCC  
 GACTTACAAGAGCCAGTTCTCTATCTGCATGAACTA

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>MR216980 protein sequence  
 Red=Cloning site Green=Tags(s)

MAELLASLPAAVAVLLFFATVSGSTGPRSRENRGASRIPSQFSEEERVAIKEALKGAIQIPTVSFSHEE  
 SNTTALAEFGEYIRKAFPTVFHSSLVQHEVVAKYSHLFTIQSDPSLQPYMLMAHIDVVPAPPEGWEVPP  
 FSGLERNGFIYGRGALDNKNSVMAILHALELLLRNYSKRSFFIALGHDEEVSGEKGAQKISALLQARG  
 VQLAFLVDEGSFILEGFIPNLEKPVAMISVTEKALDMLQVNMTPGHSSAPPKETSIGILSAAVSRLEQ  
 TPMPNMFGGGPLKTMKLLANEFSPINIVLRNLWLFHPIVSRIMERNPITNALVRTTTALTMFNAGIKV  
 NVIPPLAQTINCRIHPSQTVHEVLELVKNTVADDRVQLHVLRSFEPLIPSPDDQAMGYQLLQETIRSV  
 FPEVDIVVPGICIANTRHYANITNGMYRFNPLPLNPQDFSGVHGINEKVSQNYQNQVKFIFEFIQNA  
 DTYKEPVPHLHEL

**TRTRPLEQKLI**SEEDLAANDILDYKDDDDKV

**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**


**ACCN:** NM\_178079

**ORF Size:** 1512 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\\_178079.3](#), [NP\\_835180.2](#)

**RefSeq Size:** 3540 bp

**RefSeq ORF:** 1512 bp

**Locus ID:** 212933

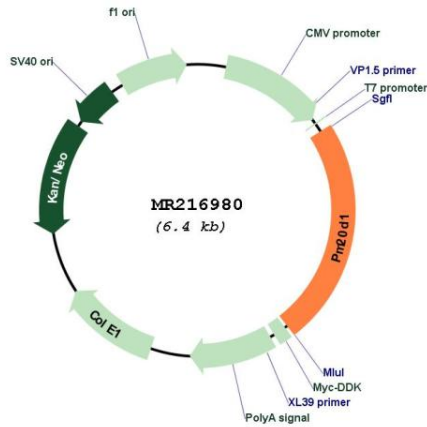
**UniProt ID:** [Q8C165](#)

**Cytogenetics:** 1 E4

**MW:** 55.7 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 MR216980