

## Product datasheet for **MR212834**

### Them5 (NM\_025416) Mouse Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Them5 (NM\_025416) Mouse Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** Them5  
**Synonyms:** 1110007B02Rik; 1110038F21Rik  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >MR212834 representing NM\_025416  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGTTGAGGACAAGTTTCCAGGGAGTGGCAAGACTTGTCCGCCACAAAGCTCTTTACAGAAGCCCCTGTC  
TCCTGCCAGAGTCCACCTGGCCTCAGCATTTGGTTCTCCACAGAGTCCCTGGTTGCAAGATTCTGCC  
AGAGAAGACAGATTTGAAAGATTATGCCCTTCCAATGCCAGCTGGTGTTCAGATATGCTGAGTCTGTAT  
CAAGAATTTCTGAAAAAACCAATCAGGCGGCTGGATAACTACCCTCCTTCAAATCCAACAGAGATC  
ATATCCAGGGCCTTAAGCTCCATTTGGGCTGGAACTGCCTCAGACAAACAGGACTGGCGCCTTTTAC  
CAGGTCCATACAAGTGAAGGACAAGGCTATGAATACGTCATCTTTTCCACCCATCTGAGAAGAAGTCT  
GTCTGTCTTTCCAGCCAGGCCCTACCTGGAGGGGCCACAGGGTTTGCTCACGGAGGGTCACTGGCAG  
CCTTGATGGATGAGACATATTCGAAAACCTGCATATCTGGCTGGAGAAGGACTATTCACACTAAGTCTAAA  
CATCAAGTTCAAAAACCTGATCCCCGTGGGCTCTTTGGCTGTCTGGACATTCAAGTAGAAAAGATTGAA  
GACCAGAACTCTACATGTCTGCATCGCCAGAGCAGAGACAAGCAGACCGTCTATGCCAAGTCTCCG  
GTGTTTTCTTCAGCTGCAGTTGGAAGAACAGTCCCAGGAGCAA

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



**Protein Sequence:** >MR212834 representing NM\_025416  
Red=Cloning site Green=Tags(s)

```

MLRTSFQGVARLVRHKALYRSPCLLPRVHLASAFGSSTESLVARFCPEKTDLKDYLALPNASWCSDMLSLY
QEFLEKTKSGGWIKLPSFKSNRDHIQGLKLPFGLETASDKQDWRLFTRSILQLEGQGYEYVIFHPSEKKS
VCLFQPGPYLEGAPGFHGGSLAALMDETYSKTAYLAGGLFTLSLNLIKFNLIIPVGLAVLDIQVEKIE
DQKLYMSCIAQSRDKQTVYAKSSGVFLQLQLEEQSQEQ
    
```

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mm9059\\_d10.zip](https://cdn.origene.com/chromatograms/mm9059_d10.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_025416

**ORF Size:** 744 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\\_025416.3](#), [NP\\_079692.1](#)

**RefSeq Size:** 1251 bp

**RefSeq ORF:** 747 bp

**Locus ID:** 66198

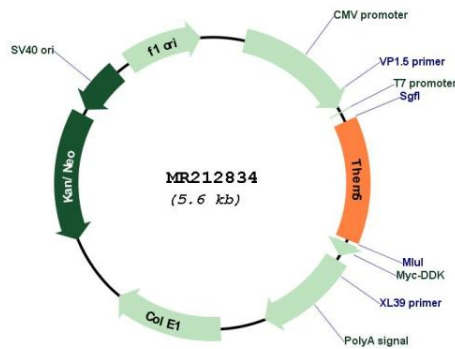
**UniProt ID:** [Q9CQJ0](#)

**Cytogenetics:** 3 F2.1

**MW:** 27.9 kDa

**Gene Summary:** Has acyl-CoA thioesterase activity towards long-chain (C16 and C18) fatty acyl-CoA substrates, with a preference for linoleoyl-CoA and other unsaturated long-chain fatty acid-CoA esters (By similarity). Plays an important role in mitochondrial fatty acid metabolism, and in remodeling of the mitochondrial lipid cardiolipin (PubMed:22586271). Required for normal mitochondrial function (PubMed:22586271).[UniProtKB/Swiss-Prot Function]

### Product images:



Circular map for MR212834