

Product datasheet for **MG212834**

Them5 (NM_025416) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Them5 (NM_025416) Mouse Tagged ORF Clone
Tag: TurboGFP
Symbol: Them5
Synonyms: 1110007B02Rik; 1110038F21Rik
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >MG212834 representing NM_025416
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGTTGAGGACAAGTTTCCAGGGAGTGGCAAGACTTGTCCGCCACAAAGCTCTTTACAGAAGCCCTGTC
TCCTGCCAGAGTCCACCTGGCCTCAGCATTTGGTTCTCCACAGAGTCCCTGGTTGCAAGATTCTGCC
AGAGAAGACAGATTTGAAAGATTATGCCCTTCCAATGCCAGCTGGTGTTCAGATATGCTGAGTCTGTAT
CAAGAATTTCTGAAAAAACCAATCAGGCGGCTGGATAACTACCCTCCTTCAAATCCAACAGAGATC
ATATCCAGGGCCTTAAGCTCCATTTGGGCTGGAACTGCCTCAGACAAACAGGACTGGCGCCTTTAC
CAGGTCCATACAAGTGAAGGACAAGGCTATGAATACGTCATCTTTTCCACCCATCTGAGAAGAAGTCT
GTCTGTCTTTCCAGCCAGGCCCTACCTGGAGGGGCCACAGGGTTTGCTCACGGAGGGTCACTGGCAG
CCTTGATGGATGAGACATATTCGAAAAGTGCATATCTGGCTGGAGAAGGACTATTCACACTAAGTCTAAA
CATCAAGTTCAAAAAGTGTATCCCGTGGGCTCTTTGGCTGTCTGGACATTCAAGTAGAAAAGATTGAA
GACCAGAACTCTACATGTCTGCATCGCCAGAGCAGAGACAAGCAGACCGTCTATGCCAAGTCTCCG
GTGTTTTCTTCAGCTGCAGTTGGAAGAACAGTCCCAGGAGCAA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >MG212834 representing NM_025416
Red=Cloning site Green=Tags(s)

MLRTSFQGVARLVRHKALYRSPCLLPRVHLASAFGSSTESLVARFCPEKTDLKDYALPNASWCSDMLSLY
 QEFLEKTKSGGWIKLPSFKSNRDHIQGLKLPFGLETASDKQDWRLFTRSIQLEGQGYEYVIFHPSEKKS
 VCLFQPGPYLEGAPGFHGGSLAALMDETYSKTAYLAGEGLFTLSLNIFKNLIPVGLAVLDIQVEKIE
 DQKLYMSCIAQSRDKQTVYAKSSGVFLQLQLEEQSQEQ

TRTRPLE - GFP Tag - V

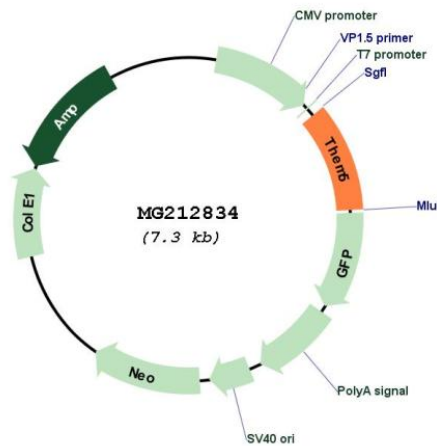
Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:



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:	<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.
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
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]