

## Product datasheet for SC307443

### THEM5 (NM\_182578) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	THEM5 (NM_182578) Human Untagged Clone
Tag:	Tag Free
Symbol:	THEM5
Synonyms:	ACOT15
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>SC307443 representing NM_182578. Blue=Insert sequence Red=Cloning site Green=Tag(s)

```
GCTCGTTT TAGTGAACCGTCAGAATTTTGT AATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCC CGGATCGCC
ATGATAAGGAGATGCTTCCAGGTGGCAGCAAGACTTGGCCACCACAGAGGCCCTTCTTGAGCCCCCGT
ATCCTGCCAGACTCAACCCTGCCTCAGCATTTGGATCCTCCACAGACTCCATGTTCTCAAGATTCTG
CCAGAGAAGACAGACTTGAAGGATTATGCTCTTCCCAATGCCAGCTGGTGTTCGGACATGCTGAGCCTG
TACCAAGAATTTCTGGAGAAGACTAAGTCTAGCGGCTGGATCAAGCTGCCCTCCTCAAGTCCAACAGA
GACCACATCCGGGACTCAAGTCCCATCTGGACTGGCAGTTTCTCAGACAAAGGTGACTGTCGCATC
TTCACCAGGTGCATCCAAGTGAAGGACAAGGCTTTGAGTATGCATCTTTTTCCAGCCAACCCAGAAG
AAGTCGGTCTGTCTTTTCCAACCAAGGCTCTACCTGGAGGGGCCCCAGGGTTTGCCTCACGGCGGGTCC
CTGGCAGCCATGATGGACGAGACCTTTTCTAAAACCTGCCTTCTGGCTGGAGAGGGGCTGTTCACTA
AGTCTCAACATCAGGTTCAAAAACCTTGATCCCCGTGGACTCTCTGGTTGTAATGGACGTAGAAGTGGAC
AAGATTGAGGACCAGAAGCTTTACATGTCTGCATCGCCACAGCAGAGACCAGCAGACAGTTTATGCC
AAGTCCTCAGGTGTTTTCCTTCAGCTGCAGTTGGAAGAAGAGTCTCCCCAGTAA
ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT
TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC
```

Restriction Sites:	Sgfl-Mlul
ACCN:	NM_182578
Insert Size:	744 bp



[View online »](#)

<b>OTI Disclaimer:</b>	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
<b>OTI Annotation:</b>	This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>
<b>RefSeq:</b>	<u><a href="#">NM_182578.3</a></u>
<b>RefSeq Size:</b>	1146 bp
<b>RefSeq ORF:</b>	744 bp
<b>Locus ID:</b>	284486
<b>UniProt ID:</b>	<u><a href="#">Q8N1Q8</a></u>
<b>Cytogenetics:</b>	1q21.3
<b>MW:</b>	27.7 kDa
<b>Gene Summary:</b>	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 (PubMed:22586271). 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]