

## Product datasheet for **RC201505**

### **THEM2 (ACOT13) (NM\_018473) Human Tagged ORF Clone**

#### Product data:

Product Type: Expression Plasmids

Tag: Myc-DDK

Symbol: THEM2

Synonyms: HT012; PNAS-27; THEM2

Mammalian Cell Selection: Neomycin

Vector: pCMV6-Entry (PS100001)

E. coli Selection: Kanamycin (25 ug/mL)

ORF Nucleotide Sequence: >RC201505 ORF sequence  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGACCAGCATGACTCAGTCTCTGCGGGAGGTGATAAAGGCCATGACCAAGGCTCGCAATTTGAGAGAG  
TTTTGGGAAAGATTACTTTGTCTCTGCTGCTCCTGGGAAAGTGATTTGTGAAATGAAAGTAGAAGAAGA  
GCATACCAATGCAATAGGCACTCTCCACGGCGGTTTGACAGCCACGTTAGTAGATAACATATCAACAATG  
GCTCTGCTATGCACGAAAGGGGAGCACCCGGAGTCAGTGTGATATGAACATAACGTACATGTCACCTG  
CAAAATTAGGAGAAGATATAGTGATTACAGCACATGTTCTGAAGCAAGGAAAAACACTTGCAATTTACCTC  
TGTGGATCTGACCAACAAGGCCACAGGAAATTAATAGCACAAAGGAAGACACAAAAACCTGGGAAAC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC201505 protein sequence  
Red=Cloning site Green=Tags(s)

MTSMTQSLREVIKAMTKARNFERVLGKITLVSAAPGKVICEMKVEEHTNAIGTLHGGLTATLVDNISTM  
ALLCTERGAPGVSDMNITYMSPAKLGEDIVITAHVLKQKTLAFTSVDLTNKATGKLIQGRHTKHLGN

**TR**TRPLE**QKL**ISEEDLAANDILDYKDDDDKV

Chromatograms: [https://cdn.origene.com/chromatograms/mk6301\\_h10.zip](https://cdn.origene.com/chromatograms/mk6301_h10.zip)

Restriction Sites: SgfI-MluI



[View online »](#)

Cloning Scheme:



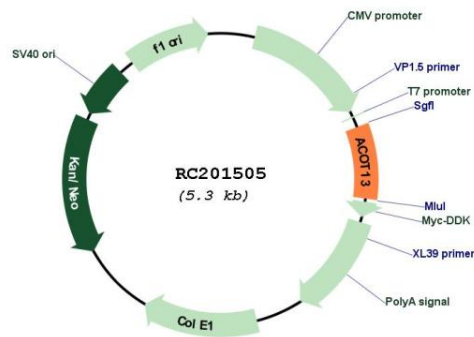
ACCN:	NM_018473
ORF Size:	420 bp
OTI Disclaimer:	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. <a href="#">More info</a>
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"> <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>
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	<a href="#">NM_018473.4</a>
RefSeq Size:	4118 bp

RefSeq ORF: 423 bp  
 Locus ID: 55856  
 UniProt ID: [Q9NPJ3](#)  
 Cytogenetics: 6p22.3  
 Domains: 4HBT

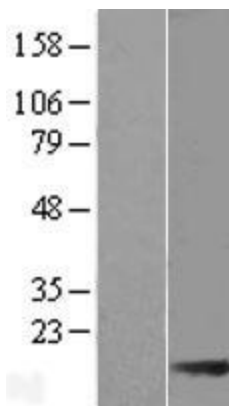
MW: 15 kDa

**Gene Summary:** This gene encodes a member of the thioesterase superfamily. In humans, the protein co-localizes with microtubules and is essential for sustained cell proliferation. The orthologous mouse protein forms a homotetramer and is associated with mitochondria. The mouse protein functions as a medium- and long-chain acyl-CoA thioesterase. Multiple transcript variants encoding different isoforms have been found for this gene.[provided by RefSeq, May 2009]

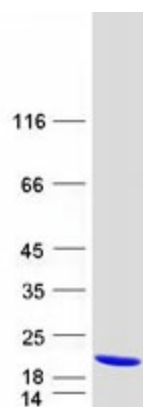
### Product images:



Circular map for RC201505



Western blot validation of overexpression lysate (Cat# [LY413049]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC201505 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified ACOT13 protein (Cat# [TP301505]). The protein was produced from HEK293T cells transfected with ACOT13 cDNA clone (Cat# RC201505) using MegaTran 2.0 (Cat# [TT210002]).