

## Product datasheet for **RC201738**

### Thimet Oligopeptidase (THOP1) (NM\_003249) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Thimet Oligopeptidase (THOP1) (NM_003249) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Thimet Oligopeptidase
Synonyms:	EP24.15; MEPD_HUMAN; MP78; TOP
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide  
Sequence:

>RC201738 ORF sequence  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCCGCGATCGCC

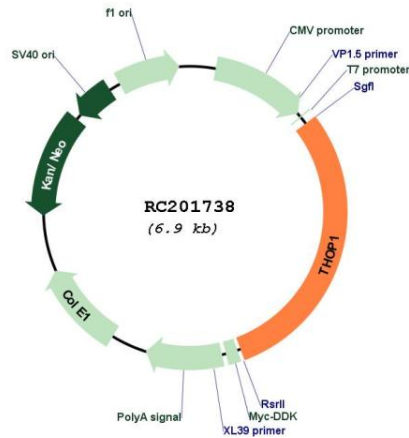
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CTTCGACGGCCGATCCGTGCCCTGGGACATGCGCTACTACATGAACAGGTGGAGGAGACGCGCTACTGC  
GTGGACCAGAACCTGCTCAAGGAGTACTCCCCGTGCAGGTGGTACGCACGGGCTGCTGGGCATCTACC  
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CACCGCAGGGGACGCGGCCCTCGGGGAGGTGGTCGGCAAGTTCTACCTGGACCTGTACCCGCGGGAAGGA  
AAGTACGGGCACGCGCCTGCTTTGGCCTGCAGCCGGTGCCTGCGGCAGGATGGGAGCCGCCAGATCG  
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TTCAGCGGGACCCAGTGGAGCGGGACTTTGTGGAGGCGCCGTCGCAGATGCTGGAGAATGGGTGTGGG  
AGCAGGAGCCGCTGCTGCGGATGTGCGGCACTACCGCACAGGCAGCGCCGTGCCCGGGAGCTCCTGGA  
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GACCAGGCCCTGCACACGCAGACGGACGCAGACCCCGCCGAGGAGTATGCGCGGCTCTGCCAGGAGATCC  
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CCAGTACTACGGGTACCTGTGGAGCGAGGTGATTCCATGGACATGTTCCACACGCGCTTCAAGCAGGAG  
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CCAGCGCCATGCTGAGGCGCTTCTGGGCCGTGACCCCAAGCAGGACGCCTTCTCTGAGCAAGGGGCT  
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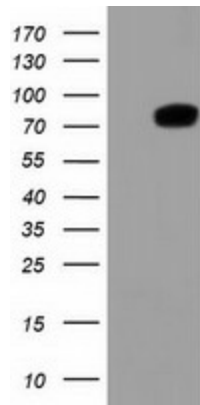


<b>Components:</b>	The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</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>	<a href="#">NM_003249.5</a>
<b>RefSeq Size:</b>	2568 bp
<b>RefSeq ORF:</b>	2070 bp
<b>Locus ID:</b>	7064
<b>UniProt ID:</b>	<a href="#">P52888</a>
<b>Cytogenetics:</b>	19p13.3
<b>Domains:</b>	Peptidase_M3
<b>Protein Families:</b>	Druggable Genome, Protease
<b>Protein Pathways:</b>	Renin-angiotensin system
<b>MW:</b>	78.8 kDa
<b>Gene Summary:</b>	The protein encoded by this gene is a kininase that uses zinc as a cofactor. The encoded oligopeptidase cleaves cytosolic peptides, making them unavailable for display on antigen-presenting cells. This protein also cleaves neuropeptides under 20 aa in length and can degrade beta-amyloid precursor protein to amyloidogenic peptides. [provided by RefSeq, Nov 2015]

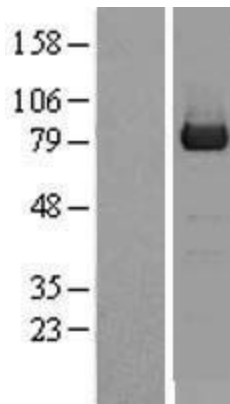
Product images:



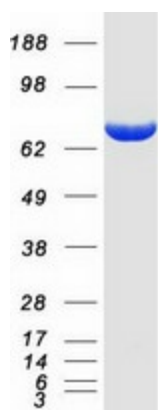
Circular map for RC201738



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY THOP1 (Cat# RC201738, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-THOP1 (Cat# [TA501409]). Positive lysates [LY401123] (100ug) and [LC401123] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY401123]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC201738 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified THOP1 protein (Cat# [TP301738]). The protein was produced from HEK293T cells transfected with THOP1 cDNA clone (Cat# RC201738) using MegaTran 2.0 (Cat# [TT210002]).