

Product datasheet for **SC118078**

Thimet Oligopeptidase (THOP1) (NM_003249) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Thimet Oligopeptidase (THOP1) (NM_003249) Human Untagged Clone
Tag:	Tag Free
Symbol:	Thimet Oligopeptidase
Synonyms:	EP24.15; MEPD_HUMAN; MP78; TOP
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF: >OriGene ORF within SC118078 sequence for NM_003249 edited (data generated by NextGen Sequencing)

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ATGAAGCCCCCGCAGCCTGTGCAGGAGACATGGCGGACGCAGCATCTCCGTGCTCTGTG
GTAAACGACCTGCGGTGGGACCTGAGTGCCAGCAGATAGAGGAGCGCACCCAGGGAGCTC
ATCGAGCAGACCAAGCGCGTGTATGACCAGGTTGGCACCAGGAGTTTGGAGACGTGTCC
TACGAGAGCAGCCTCAAGCGCGTGGCCGATGTGGAGGTCACCTACACAGTTCAGAGGAAT
ATCCTTGACTTCCCCAGCATGTTTCCCTCCAAGGACATCCGGACAGCCAGCACAGAG
GCCGACAAGAAGCTCTCTGAGTTGACGCTGGAGATGAGCATGAGGGAGGACGTGTACCAG
AGGATCGTGTGGCTCCAGGAGAAAGTTCAGAAGGACTCACTGAGGCCGAGGCTGCGCGG
TACCTGGAGCGGCTAATCAAGCTGGGCCGAGAAATGGGCTTACCTCCCAGAGAGACT
CAGGAAAACATCAAACGCATCAAGAAGAAGCTGAGCCTTCTGTGCATCGACTTCAACAAG
AACCTGAACGAGGACACGACCTTCTGCCCTTACGCTCCAGGAGCTAGGAGGGCTCCCC
GAGGACTTTCTGAACTCCCTGGAGAAGATGGAGGACGGCAAGTTGAAGGTCACCTCAAG
TACCCCACTTACTTCCCTCCTGAAGAAATGCCACGTGCCTGAGACCAGGAGGAAAGTG
GAGGAGGCCTTCAACTGCCGGTGAAGGAGGAGAACTGCGCTATCCTCAAGGAGCTGGTG
ACGCTGCGGGCCAGAAGTCCCGCTGTGGGGTTCCACACGCACGCCGACTATGTCCTG
GAGATGAACATGGCCAAGACCAGCCAGACCGTGGCCACCTTCTAGATGAGCTGGCGCAG
AAGCTGAAGCCCCTGGGGGAGCAGGAGCGTGCGGTGATTCTGGAGCTGAAGCGTGCGGAG
TGCGAGCGCCGGGGCTGCCCTTCGACGGCCGATCCGTGCCTGGGACATGCGCTACTAC
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CCCGTGCAGGTGGTCACGCACGGGCTGCTGGGCATCTACCAGGAGCTCCTGGGGCTGGCC
TTCCACCAGGAGGGGCGCCAGTGCCTGGCATGAGGACGTGCGGCTCTACACCGCGAGG
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TCGCTGCTGCAGCATGACGAGGTGGAGACCTACTTCCATGAGTTTGGCCACGTGATGCAC
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GAGTCCCGGCAGGCCAACACAGGCTCTTCAACCTGCGCCAGATCGTCTCGCCAAGGTG
GACCAGGCCCTGCACACGCAGACGGACGCAGACCCCGCCGAGGAGTATGCGCGGCTGTC
CAGGAGATCCTCGGGTCCCGGCCACGCCAGGAACCAACATGCCTGCAACCTTCGCCAT
CTGGCAGGTGGTACGACGCCCAGTACTACGGGTACCTGTGGAGCGAGGTGATTCCATG
GACATGTTCCACACGCGCTTCAAGCAGGAGGGTGTCTGAACAGCAAGGTTGGCATGGAT
TACAGAAGCTGCATCCTGAGACCCGGCGGTTCCGAGGATGCCAGCGCCATGCTGAGGCGC
TTCCTGGGCGGTGACCCCAAGCAGGACGCCTTCTCCTGAGCAAGGGGCTGCAGGTGCGG
GGCTGCGAGCCCCGAGCCGAGGTCTGCTGA
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Clone variation with respect to NM_003249.3

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_003249 unedited
 ATTTTGTAAATACGACTTACTATAGGGCGGCCGCGCAATTCGCACGAGGGCGGGCGGGCC
 CTTGGTCTCAGGCGGCCGTGGCGGGCGTGGCGGGCGTTGGGCCGAGGCAGGCGGGCTCA
 GTGGCCGAGGTGGCTGGACGCGTAGCAGGTGGAAGGAGGGAGGGAGCCGAGGCGCAGAC
 CCACCCGCCATGAAGCCCCCGCAGCCTGTGCAGGAGACATGGCGGACGCAGCATCTCCG
 TGCTCTGTGGTAAACGACCTGCGGTGGGACCTGAGTGCCACAGATAGAGGAGCGCACC
 AGGGAGCTCATCGAGACACCAAGCGCGTGTATGACCAGGTTGGCACCCAGGAGTTTGAG
 GACGTGTCTACGAGAGCACGCTCAAGGCGCTGGCCGATGTGGAGGTACCTACACAGTT
 CAGAGGAATATCCTTGACTTCCCCCAGCATGTTTCCCCCTCCAAGGACATCCGGACAGCC
 AGCACAGAGGCCGACAAGAAGCTCTCTGAGTTCGACGTGGAGATGAGCATGAGGGAGGAC
 GTGTACCAGAGGATCGTGTGGCTCCAGGAGAAAGTTCAGAAGGACTCACTGAGGCCCGAG
 GCTGCGCGGTACCTGGAGCGCTAATCAAGCTGGGCCGGAGAAATGGGCTTACCTCCCC
 AGAGAGACTCAGGANAACATCAAACGCATCAAGAAGAAGCTGAGCCTTCTGTGCATCGAC
 TTCAACAAGAACCTGAACGAGGACACGACCTTCTGCCCTTACGCTCCAGGAGCTAGGA
 GGGCTCCCGAGGACTTCTGAAACTCCTGGAGAAGATGNNAGACNNGCAGNTGAAGGTC
 ACCCNTTCAGTACCCATTACTTCCCCNNCTGAGAAAATGCCACGTGCCCTGAGACCAGN
 NNAGAAGTGGNAGAGGCCCTTCACTGNCCNGTGCAGGGAGAGACTGCGCTTNTCTCAGGAG
 CTGTGACGCTCNGNCCAAAGTCCGCTGCTGGGT

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_003249 unedited
 CGCGGCCGCAATCTAGNATCGAGTTTTTTTTTTTTTTTTTTTTTCTGTTTCCTTTAATGACC
 TCATTTCAAAAAAAGCCGTCTCCTGACAAGGGACGTTTCCAGAGAGGAGACGTGTTAG
 TGCAACAAAGACCAGGCCCTGGCAGCCACGAAAGCCCTCCAGATGCCTTGAGGACGCCGT
 CTCTAGCCGGGTGGGCCACGACCGGGTGGGGACAGACAATGACAAGAGGCAAGACAGCCG
 CTCAGCCACCCTGCCAGTCCCAGGCACTGTGCCAGAGCCTGCCCATCCTGTGCCGGGG
 CTAAGGCACCAGGGCGGGGAGCGCAGGCCAGACTGGGCAGTCGCAGTCCAGGCTCA
 GCAGACCTGCGGCTCGGGCTCGCAGCCCCGACCTGCAGCCCCTTGCTCAGGAGGAAGGC
 GTCCTGCTGGGGTACCAGGCCAGGAAGCGCCTCAGCATGGCGCTGGCATCCTCGGAAC
 CGCCGGTCTCAGGATGCAGTCTGTGTAATCCATGCCAACCTTGCTGTTTCAGGACACCCT
 CCTGCTTGAAGCGCGTGTGGAACATGTNCAATGGAATACACCTCGCTCCACAGTACCCGT
 AGCACTGCGCGTGTACCCACCTGCCAGATTGGCCGAAGCTGCAGGCATGCTGGTTCCTG
 GCGTGCCCGGACCCNGAGGATCTCCTGCCAGAGCCGCGCATACTCCTCGGTGGGGTCTG
 CGCCCGTTTGCCTGTGCAAGGCCTGATCCACCTGGCCGAGGACAACTGGCGCACGTTGA
 AAAAGCCTGTTGTTGCCCGCCGACTCATTGAGCTTCTCAGAACCTACCGGGGCAAGG
 TCCTGCTGGGCGGTAATGCCGCAACTCCGCATCAAGGGTTCCTTGGTCCCAACCCAG
 TTTCTACAATTGTGGGAAGCGGCTCACACAAAG

Restriction Sites:

NotI-NotI

ACCN:

NM_003249

Insert Size:

2680 bp

OTI Disclaimer:

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).

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_003249.3 , NP_003240.1
RefSeq Size:	2568 bp
RefSeq ORF:	2070 bp
Locus ID:	7064
UniProt ID:	P52888
Cytogenetics:	19p13.3
Domains:	Peptidase_M3
Protein Families:	Druggable Genome, Protease
Protein Pathways:	Renin-angiotensin system
Gene Summary:	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]