

## Product datasheet for RC207917

### Tripeptidyl peptidase II (TPP2) (NM\_003291) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Tripeptidyl peptidase II (TPP2) (NM_003291) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Tripeptidyl peptidase II
Synonyms:	IMD78; TPP-2; TPP-II; TPPII
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC207917 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCCACCGCTGCGACTGAGGAGCCCTCCCTTTTCACGGTCTCCTGCCGAAGAAGGAGACCGGAGCCG  
CCTCCTTCTCTGCCGCTACCCGGAGTATGATGGGCGGGGGTCTCATCGCAGTCTGGACACGGGGT  
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GAAGAGTGCTTAAGATTCTGCAAGCTGGACAAAATCCCTCAGGCAAATATCATATTGGCATAAAAAATGG  
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GTTACAGAGTGGCCCTTGCAAGCCTGTAGAAAACAGGAAGAAATTTGATGTTGCCAACACCGCTCTT  
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ATACAGCGATCCTGGCCCTGTATGACTGCTTGGTATGGCATGATGGCGAAGTCTGGAGAGCCTGCATT  
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GTGGAACACATCAAGTGTGATAGGTGTTGGTCTTATGTTTCTCCTGATATGATGGTTGCTGAGTATTC  
ACTGAGAGAGAAATTACCTGCAATCAATATACTTGGTCTTCTAGAGGACCTAGTGTGACGGGGCCCTT  
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AATATAGAAGTATTTGCTCAAGGACATGGTATTATTCAGGTTGATAAAGCCTATGACTACCTCGTTCAGA  
ATACATCATTTGCTAATAAATTAGGTTTTACTGTTACTGTTGAAATAACCGTGGCATCTACCTCCGAGA  
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GCTCCCCATCATGTATCCTCCCGATTATTGCGTATTC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC207917 protein sequence  
 Red=Cloning site Green=Tags(s)

MATAATEEPFFHGLLPKKTGAASFLCRYPEYDGRGVLIAVLDTGVDPGAPGMQVTTDGPKIVDIIDT  
 TGSQDVNTATEVEPKDGEIVGLSGRVLKIPASWTNPSGKYHIGIKNGYDFYPKALKERIKERKEKIWDP  
 VHRVALAEACRKQEEFDVANNGSSQANKLIKEELQSQVELLNSFEKKYSDPGPVYDCLVWHGDEVWRACI  
 DSNEDGDLKSTVLRNYKEAQEYGSFGTAEMLNYSVNIYDDGNLLSIVTSGGAHGTHVASIAAGHFPEEP  
 ERNGVAPGAQILSIKIGDTRLSTMETGTGLIRAMIEVINHKCDLVNYSYGEATHWPNSGRICEVINEAVW  
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 GVSISAPGGAIASVPNWTLRGTQLMNGTSMSSPNACGGIALILSGLKANNIDYTVHVSRRALENTAVKAD  
 NIEVFAQGHGIIQVDKAYDYLQNTSFANKLGFTVTVGNNRGIYLRDPVQVAAPSDHGVGIEPVFENTE  
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 ITAVIAAKVNESSHYDLAFTDVHFKPGQIRRH IEVPEGATWAEVTVCSSESSEVSAKFLHAVQLVKQRA  
 YRSHEFYKFCSLPEKGTLEAFVVLGGKAEFCIARWWASLSDVNIDYTI SFHGIVCTAPQLNIHASEGI  
 NRFQVQSSLYEDLAPCITLKNWVQTLRPVSAKTKPLGSRDVL PNNRQL YEMVL TYNFHQPKSGEVT  
 PSC PLLCELLYESEFDSQLWIFDQNKRMGSGDAYPHQYSLKLEKGDYTI RQLRHEQISDLERLKDLPFIV  
 SHRLSNTLSLDIHENHSFALLGKKKSSNLTLPPKYNQPFVTSLPDDKIPKGAGPGCYLAGSLT SKTEL  
 GKKADVIPVHYLLIPPTTKNGSKDKEKDLKEEFTEALRDLKIQWMTKLDSSDIYNELKETYP  
 NYLPLVYARLHQLDAEKERMKRLNEIVDAANAVISHIDQTALAVYIAMKTDPRPDAATIKNDMDKQKSTL  
 VDALCRKGCALADHLLHTQAQDGAISTDAEGKEEEGESPLDSLAEFTWETTKWTDLFDNKVLTFAFKHAL  
 VNKMVGRGLKFA TKLVEEKPTKENWKNCIQLMKLLGWTHCASFTENWLPIMYPPDYCVF

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: [https://cdn.origene.com/chromatograms/mk6204\\_d06.zip](https://cdn.origene.com/chromatograms/mk6204_d06.zip)

Restriction Sites: SgfI-MluI

Cloning Scheme:

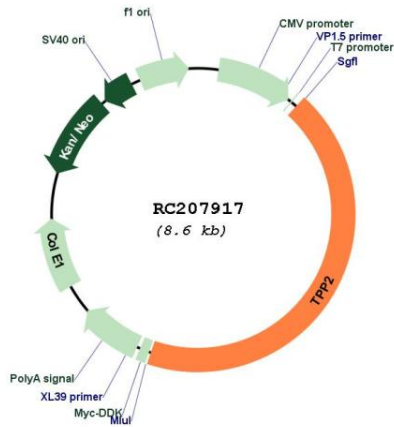


ACCN: NM\_003291

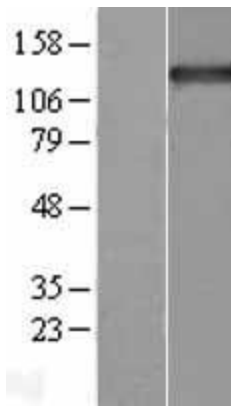
ORF Size: 3747 bp

<b>OTI Disclaimer:</b>	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>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<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_003291.4</a>
<b>RefSeq Size:</b>	4716 bp
<b>RefSeq ORF:</b>	3750 bp
<b>Locus ID:</b>	7174
<b>UniProt ID:</b>	<a href="#">P29144</a>
<b>Cytogenetics:</b>	13q33.1
<b>Domains:</b>	Peptidase_S8
<b>Protein Families:</b>	Druggable Genome, Protease
<b>MW:</b>	138.3 kDa
<b>Gene Summary:</b>	This gene encodes a mammalian peptidase that, at neutral pH, removes tripeptides from the N terminus of longer peptides. The protein has a specialized function that is essential for some MHC class I antigen presentation. The protein is a high molecular mass serine exopeptidase; the amino acid sequence surrounding the serine residue at the active site is similar to the peptidases of the subtilisin class rather than the trypsin class. [provided by RefSeq, Jul 2008]

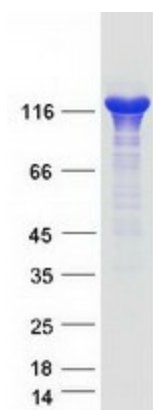
Product images:



Circular map for RC207917



Western blot validation of overexpression lysate (Cat# [LY401135]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC207917 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified TPP2 protein (Cat# [TP307917]). The protein was produced from HEK293T cells transfected with TPP2 cDNA clone (Cat# RC207917) using MegaTran 2.0 (Cat# [TT210002]).