

Product datasheet for **RC224901**

TPOR (MPL) (NM_005373) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	TPOR (MPL) (NM_005373) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	MPL
Synonyms:	C-MPL; CD110; MPLV; THCYT2; THPOR; TPOR
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide
Sequence:

>RC224901 representing NM_005373
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCCGGATCGCC

ATGCCCTCTGGGCCCTTTCATGGTCACCTCCTGCCTCCTCTGGCCCTCAAACCTGGCCCAAGTCA
GCAGCCAAGATGTCTCCTTGCTGGCATCAGACTCAGAGCCCTGAAGTGTCTCCCGAACATTTGAGGA
CCTCACTTGCTTCTGGGATGAGGAAGAGGCAGCGCCAGTGGGACATACCAGCTGCTGTATGCCACCCG
CGGGAGAAGCCCCGTGCTTGCCCTGAGTTCCAGAGCATGCCCACTTTGGAACCCGATACGTGTGCC
AGTTTCCAGACCAGGAGGAAGTGCCTCTTTCCGCTGCACCTCTGGGTGAAGAATGTGTTCTAA
CCAGACTCGGACTCAGCGAGTCTCTTTGTGGACAGTGTAGGCCTGCCGGCTCCCCCAGTATCATCAAG
GCCATGGTGGGAGCCAGCCAGGGAATTCAGATCAGCTGGGAGGAGCCAGCTCCAGAAATCAGTGATT
TCCTGAGGTACGAACTCCGCTATGGCCCCAGAGATCCCAAGAACTCCACTGGTCCCACGGTCATACAGCT
GATTGCCACAGAAACCTGCTGCCCTGCTCTGCAGAGGCCTCACTCAGCCTCTGCTCTGGACCAGTCTCCA
TGTGCTCAGCCACAATGCCCTGGCAAGATGGACCAAGCAGACCTCCCCAAGTAGAGAAGCTTCAGCTC
TGACAGCAGAGGGTGAAGCTGCCTCATCTCAGGACTCCAGCCTGGCAACTCCTACTGGTGCAGCTGCG
CAGCGAACCTGATGGGATCTCCCTCGGTGGCTCCTGGGATCCTGGTCCCTCCCTGTGACTGTGGACCTG
CCTGGAGATGCAGTGGCACTTGGACTGCAATGCTTTACCTTGGACCTGAAGAATGTTACCTGTCAATGGC
AGCAACAGGACCATGCTAGCTCCCAAGGCTTCTTACCACAGCAGGGCAGCGTGTGCCCCAGAGACAG
GTACCCCATCTGGGAGAAGTGCAGAGGAAGAGAAAAACAAATCCAGGACTACAGACCCACAGTCTCT
CGCTGCCACTTCAAGTACGAAATGACAGCATTATTCACATCCTTGTGGAGGTGACCACAGCCCCGGTA
CTGTTACAGCTACCTGGGCTCCCCTTTCTGGATCCACCAGGCTGTGCGCCTCCCCACCCAACTTGCA
CTGGAGGGAGATCTCCAGTGGGCATCTGGAATTGGAGTGGCAGCACCCATCGTCCCTGGGCAGCCCAAGAG
ACCTGTTATCAACTCCGATACACAGGAGAAGGCCATCAGGACTGGAAGGTGCTGGAGCCGCTCTCGGGG
CCCGAGGAGGGACCCTGGAGCTGCGCCCGCATCTCGCTACCGTTTACAGCTGCGCGCCAGGCTCAACGG
CCCCACCTACCAAGTCCCTGGAGCTCGTGGTCCGACCCAACTAGGGTGGAGACCGCCACCGAGACCGCC
TGGATCTCCTTGGTGACCGCTCTGCATCTAGTGTGGCCTCAGCGCCGCTCTGGGCTGCTGCTGCTGA
GGTGGCAGTTTCTGCACACTACAGGAGACTGAGGCATGCCCTGTGGCCCTCACTCCAGACCTGCACCG
GGTCTAGGCCAGTACCTTAGGGACTGCAGCCCTGAGCCCGCCAAGGCCACAGTCTCAGATACCTGT
GAAGAAGTGAACCCAGCCTCCTTGAATCCTCCCAAGTCTCAGAGAGGACTCCTTTGCCCTGTGTT
CCTCCCAGGCCAGATGGACTACCGAAGATTGCAGCCTTCTTGCCTGGGACCATGCCCTGTCTGTGTG
CCCACCATGGCTGAGTCAGGGTCTGCTGTACCACCCACATTGCCAACCATTCCTACTACCACTAAGC
TATTGGCAGCAGCCT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTAA

Protein Sequence: >RC224901 representing NM_005373
 Red=Cloning site Green=Tags(s)

MPSWALFMVTSCLLLAPQNLAQVSSQDVSLASDSEPLKCFSRTFEDLTCFWDEEEAAPSGTYQLLYAYP
 REKPRACPLSSQSMPHFGTRYVCQFPDQEEVRLFFPLHLWVKNVFLNQTRTRQVLFVDSVGLPAPPSIIK
 AMGGSQPGELQISWEEPAPEISDFLRYELRYGPRDPKNSTGPTVIQLIATETCCPALQRPHSASALDQSP
 CAQPTMPWQDGPQKQTSRSPREASALTAEGGSCLISGLQPGNSYWLQLRSEPDGISLGGSWGWSLPTVDL
 PGDAVALGLQCFTLDLKNVTCQWQQDHASSQGFYHSRARCPCPRDRYPWENEEEEKTNPGLQTPQFS
 RCHFCSRNDIIHILVEVTTAPGTVHSHYLGSPFWIHQAVRLPTPNLHWREISSGHLELEWQHPSWAAQE
 TCYQLRYTGEGHQDWKVLPEPLGARGGTLELRPRSRYRLQLRARLNGPTYQGPWSSWSDPTRVETATETA
 WISLVTAHLVGLSAVLGLLLRWQFPAHYRRLRHAWPSLPDLHRVLGQYLRDTAALSPPKATVSDTC
 EEVEPSLLEILPKSSERTPLPLCSSQAQMDYRRLQPSCLGTMPLSVCPPMAESGSCCTTHIANHSYLPLS
 YWQQP

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

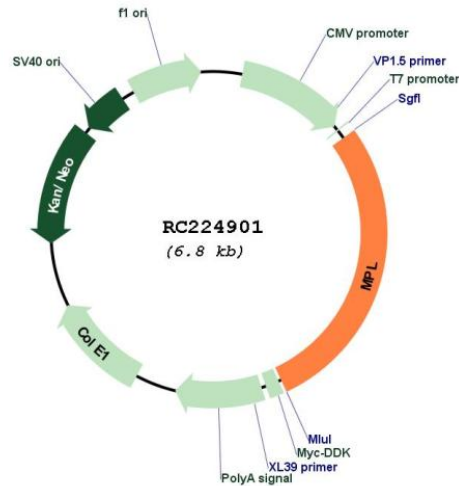
Chromatograms: https://cdn.origene.com/chromatograms/mg3642_c09.zip

Restriction Sites: Sgfl-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_005373

ORF Size: 1905 bp

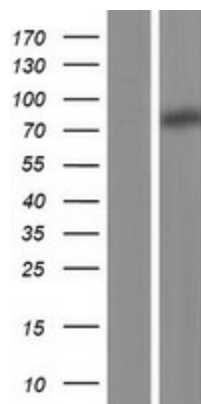
OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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. [More info](#)

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">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_005373.3
RefSeq Size:	3646 bp
RefSeq ORF:	1908 bp
Locus ID:	4352
UniProt ID:	P40238
Cytogenetics:	1p34.2
Protein Families:	Druggable Genome, Transmembrane
Protein Pathways:	Cytokine-cytokine receptor interaction, Jak-STAT signaling pathway
MW:	71.24 kDa
Gene Summary:	<p>In 1990 an oncogene, v-mpl, was identified from the murine myeloproliferative leukemia virus that was capable of immortalizing bone marrow hematopoietic cells from different lineages. In 1992 the human homologue, named, c-mpl, was cloned. Sequence data revealed that c-mpl encoded a protein that was homologous with members of the hematopoietic receptor superfamily. Presence of anti-sense oligodeoxynucleotides of c-mpl inhibited megakaryocyte colony formation. The ligand for c-mpl, thrombopoietin, was cloned in 1994. Thrombopoietin was shown to be the major regulator of megakaryocytopoiesis and platelet formation. The protein encoded by the c-mpl gene, CD110, is a 635 amino acid transmembrane domain, with two extracellular cytokine receptor domains and two intracellular cytokine receptor box motifs. TPO-R deficient mice were severely thrombocytopenic, emphasizing the important role of CD110 and thrombopoietin in megakaryocyte and platelet formation. Upon binding of thrombopoietin CD110 is dimerized and the JAK family of non-receptor tyrosine kinases, as well as the STAT family, the MAPK family, the adaptor protein Shc and the receptors themselves become tyrosine phosphorylated. [provided by RefSeq, Jul 2008]</p>

Product images:

Western blot validation of overexpression lysate (Cat# [LY417351]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC224901 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).