

Product datasheet for SC328564

OriGene Technologies, Inc.

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Thrombopoietin (THPO) (NM_001177597) Human Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: Thrombopoietin (THPO) (NM_001177597) Human Untagged Clone

Tag: Tag Free Symbol: THPO

Synonyms: MGDF; MKCSF; ML; MPLLG; THCYT1; TPO

Mammalian Cell No

Selection:

Neomycin

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)

Fully Sequenced ORF: >SC328564 representing NM_001177597.

Blue=Insert sequence Red=Cloning site Green=Tag(s)

GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC

ATGGAGCTGACTGAATTGCTCCTCGTGGTCATGCTTCTCCTAACTGCAAGGCTAACGCTGTCCAGCCCG GCTCCTCCTGCTTGTGACCTCCGAGTCCTCAGTAAACTGCTTCGTGACTCCCATGTCCTTCACAGCAGA CTGAGCCAGTGCCCAGAGGTTCACCCTTTGCCTACACCTGTCCTGCTGCTGCTGTGGACTTTAGCTTG GGAGAATGGAAAACCCAGATGGAGGAGACCAAGGCACAGGACATTCTGGGAGCAGTGACCCTTCTGCTG GAGGGAGTGATGGCAGCACGGGGACAACTGGGACCCACTTGCCTCCATCCCTCCTGGGGCAGCTTTCT GGACAGGTCCGTCTCCTTGGGGCCCTGCAGAGCCTCCTTGGAACCCAGGGCAGGACCACAGCTCAC AAGGATCCCAATGCCATCTTCCTGAGCTTCCAACACCTGCTCCGAGGAAAGGTGCGTTTCCTGATGCTT GTCCTCACACTGAACGAGCTCCCAAACAGGACTTCTGGATTGTTGGAGACAAACTTCACTGCCTCAGCC AGAACTACTGGCTCTGGGCTTCTGAAGTGGCAGCAGGGATTCAGAGCCAAGATTCCTGGTCTGCTGAAC CAAACCTCCAGGTCCCTGGACCAAATCCCCGGATACCTGAACAGGATACACGAACTCTTGAATGGAACT CGTGGACTCTTTCCTGGACCCTCACGCAGGACCCTAGGAGCCCCGGACATTTCCTCAGGAACATCAGAC ACAGGCTCCCTGCCACCCAACCTCCAGCCTGGATATTCTCCTTCCCCAACCCATCCTCCTACTGGACAG TATACGCTCTTCCCTCTTCCACCCACCTTGCCCACCCCTGTGGTCCAGCTCCACCCCCTGCTTCCTGAC CCTTCTGCTCCAACGCCCACCCCTACCAGCCCTCTTCTAAACACATCCTACACCCACTCCCAGAATCTG **TCTCAGGAAGGGTAA**

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT

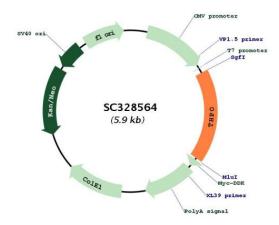
TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC

Restriction Sites: Sgfl-Mlul





Plasmid Map:



ACCN: NM_001177597

Insert Size: 1050 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).

OTI Annotation: This TrueClone is provided through our Custom Cloning Process that includes sub-cloning

into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

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: 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 001177597.2

RefSeq Size: 1911 bp RefSeq ORF: 1050 bp Locus ID: 7066



Thrombopoietin (THPO) (NM_001177597) Human Untagged Clone - SC328564

 UniProt ID:
 P40225

 Cytogenetics:
 3q27.1

Protein Families: Druggable Genome, Secreted Protein

Protein Pathways: Hematopoietic cell lineage

MW: 37.4 kDa

Gene Summary: Megakaryocytopoiesis is the cellular development process that leads to platelet production.

The main functional protein encoded by this gene is a humoral growth factor that is necessary for megakaryocyte proliferation and maturation, as well as for thrombopoiesis. This protein is the ligand for MLP/C_MPL, the product of myeloproliferative leukemia virus oncogene. Mutations in this gene are the cause of thrombocythemia 1. Alternative promoter usage and differential splicing result in multiple transcript variants differing in the 5' UTR and/or coding region. Multiple AUG codons upstream of the main open reading frame (ORF) have been identified, and these upstream AUGs inhibit translation of the main ORF at

different extent. [provided by RefSeq, Feb 2014]

Transcript Variant: This variant (2) represents use of the downstream promoter and comprises six exons. It uses an alternate in-frame splice site in the 3' coding region, compared to variant 1. The resulting isoform (2) lacks an internal segment, compared to isoform 1. Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.