

Product datasheet for SC335099

OriGene Technologies, Inc.

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Thrombopoietin (THPO) (NM_001289997) Human Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: Thrombopoietin (THPO) (NM_001289997) Human Untagged Clone

Tag: Tag Free Symbol: THPO

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

Mammalian Cell

Selection:

Neomycin

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

Fully Sequenced ORF: >NCBI ORF sequence for NM_001289997, the custom clone sequence may differ by one or

more nucleotides

GCTCCACCCCCTGCTTCCTGA

Restriction Sites: Sgfl-Mlul

ACCN: NM 001289997

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).



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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: <u>NM 001289997.1</u>, <u>NP 001276926.1</u>

RefSeq Size: 1807 bp
RefSeq ORF: 861 bp
Locus ID: 7066
UniProt ID: P40225
Cytogenetics: 3q27.1

Protein Families: Druggable Genome, Secreted Protein

Protein Pathways: Hematopoietic cell lineage

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 (4) represents use of the downstream promoter and comprises six exons. It lacks an internal segment in the 3' exon, which results in a frameshift, compared to variant 1. The resulting isoform (4) has a shorter and distinct C-terminus, 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.