

Product datasheet for SC305533

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436

OriGene Technologies, Inc.

Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

PDGF beta (PDGFB) (NM_033016) Human Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: PDGF beta (PDGFB) (NM_033016) Human Untagged Clone

Tag: Tag Free
Symbol: PDGFB

Synonyms: c-sis; IBGC5; PDGF-2; PDGF2; SIS; SSV

Mammalian Cell

Selection:

Neomycin

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

Fully Sequenced ORF: >SC305533 representing NM_033016.

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

GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT

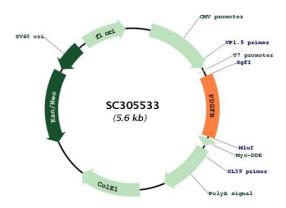
TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC

Restriction Sites: Sgfl-Mlul





Plasmid Map:



ACCN: NM_033016

Insert Size: 681 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: <u>NM 033016.3</u>



PDGF beta (PDGFB) (NM_033016) Human Untagged Clone - SC305533

RefSeq Size: 2701 bp
RefSeq ORF: 681 bp
Locus ID: 5155
UniProt ID: P01127
Cytogenetics: 22q13.1

Protein Families: Druggable Genome

Protein Pathways: Cytokine-cytokine receptor interaction, Focal adhesion, Gap junction, Glioma, MAPK signaling

pathway, Melanoma, Pathways in cancer, Prostate cancer, Regulation of actin cytoskeleton,

Renal cell carcinoma

MW: 25.5 kDa

Gene Summary: This gene encodes a member of the protein family comprised of both platelet-derived growth

factors (PDGF) and vascular endothelial growth factors (VEGF). The encoded preproprotein is proteolytically processed to generate platelet-derived growth factor subunit B, which can homodimerize, or alternatively, heterodimerize with the related platelet-derived growth factor subunit A. These proteins bind and activate PDGF receptor tyrosine kinases, which play a role in a wide range of developmental processes. Mutations in this gene are associated with meningioma. Reciprocal translocations between chromosomes 22 and 17, at sites where this gene and that for collagen type 1, alpha 1 are located, are associated with

dermatofibrosarcoma protuberans, a rare skin tumor. Alternative splicing results in multiple

transcript variants. [provided by RefSeq, Oct 2015]

Transcript Variant: This variant (2) contains an alternate 5' terminal exon, resulting in the use of an alternate start codon compared to variant (1). The encoded isoform (2) has a shorter and distinct N-terminus, and lacks a signal peptide compared to isoform 1. It is not known whether this isoform (2) is proteolytically processed in the same manner as isoform (1). CCDS Note: This CCDS representation is based on X83705.1. Although this mRNA accession lacks the final two exons, data in PMID:7659502 support the full-length nature of the transcript, and also the presence of a functional promoter at the 5' end.