

Product datasheet for **SC324287**

PDGF beta (PDGFB) (NM_002608) Human Untagged Clone

Product data:

| | |
|---------------------------|--|
| Product Type: | Expression Plasmids |
| Product Name: | PDGF beta (PDGFB) (NM_002608) Human Untagged Clone |
| Tag: | Tag Free |
| Symbol: | PDGF beta |
| Synonyms: | c-sis; IBGC5; PDGF-2; PDGF2; SIS; SSV |
| Mammalian Cell Selection: | Neomycin |
| Vector: | pCMV6-AC (PS100020) |
| E. coli Selection: | Ampicillin (100 ug/mL) |



[View online »](#)

Fully Sequenced ORF: >OriGene sequence for NM_002608.1
 GACGCCTCGGCTGGTTCGCGACGCAGCCCCCGGCCGTGGATGCTCACTCGGGCTCGGGA
 TCCGCCAGGTAGCGGCTCGGACCCAGGTCTGCGCCAGGTCTCCCTGCCCCAG
 CGACGGAGCCGGGGCCGGGGCGCGGCCCGGGGGCCATGCGGGTGAAGCCGGCTGC
 AGAGGCTGAGCGCTGATCGCCGCGGACCCGAGCCGAGCCACCCCTCCAGCCCC
 CCACCTGGCCGCGGGGGCGCGCTCGATCTACGCTCCGGGGCCCGGGGGCCGGG
 CCGGAGTCGGCATGAATCGTCTGGGCGCTTCTCTGTCTCTGTGCTACCTGCGT
 CTGGTCAGCGCCGAGGGGACCCATTCCCGAGGAGCTTATGAGATGCTGAGTGACCAC
 TCGATCCGCTCCTTTGATGATCTCCAACGCTGCTGCACGGAGACCCCGAGAGGAAGAT
 GGGCCGAGTTGGACCTGAACATGACCCGCTCCACTCTGGAGGCGAGCTGGAGAGCTTG
 GCTCGTGAAGAAGGAGCCTGGTTCCCTGACCATGCTGAGCCGGCCATGATCGCCGAG
 TGCAAGACGCGCACCGAGGTGTTGAGATCTCCCGGCGCCTCATAGACCCACCAACGCC
 AACTTCTGGTGTGGCCGCTGTGTGGAGGTGCAGCGCTGCTCCGGCTGCTGCAACAAC
 CGCAACGTGCAGTGCCGCCACCCAGGTGCAGCTGCGACCTGTCCAGGTGAGAAAGATC
 GAGATTGTGCGGAAGAAGCCAATCTTTAAGAAGGCCACGGTGACGCTGGAAGACCACCTG
 GCATGCAAGTGTGAGACAGTGGCAGCTGCACGGCTGTGACCCGAAGCCGGGGGTTCC
 CAGGAGCAGCGAGCCAAAACGCCCAAACCTCGGGTGACCATTCGGACGGTGCAGTCCGC
 CGGCCCCCAAGGGCAAGCACCGGAAATCAAGCACACGCATGACAAGACGGCACTGAAG
 GAGACCTTGGAGCCTAGGGGATCGGCAGGAGAGTGTGTGGGACGGGTTATTTAATATG
 GTATTTGCTGTATTGCCCCATGGGGTCTTGGAGTGATAATATTGTTCCCTCGTCCGT
 CTGTCTCGATGCCTGATTGCGACGGCAATGGTGTCTCCCCACCCCTCCAGTGTCCGT
 CCACCTTCCATCAGCGGGTCTCTCCAGCGGCTCCGGCGTCTTGGCCAGCAGCTCAA
 GAAGAAAAGAAGGACTGAACTCCATCGCCATCTTCTCCCTTAACTCCAAGAACTGGG
 ATAAGAGTGTGAGAGAGACTGATGGGGTGTCTTTGGGGGAAACGGGCTCTTCCCTG
 CACCTGGCCTGGCCACACCTGAGCGCTGTGGACTGTCTGAGGAGCCCTGAGGACCTCT
 CAGCATAGCCTGCCTGATCCCTGAACCCCTGGCCAGCTCTGAGGGGAGGCACCTCCAGGC
 AGGCCAGGCTGCCTCGGACTCCATGGCTAAGACCACAGACGGGCACACAGACTGGAGAAA
 ACCCTCCACGGTGCCCAAACACAGTCACCTCGTCTCCCTGGTGCCTCTGTGCACAGT
 GGCTTCTTTTCGTTTTGTTTGAAGACGTGGACTCCTCTTGGTGGGTGTGGCCAGCACA
 CCAAGTGGCTGGGTGCCCTCTCAGGTGGGTTAGAGATGGAGTTTGTCTGTGAGGTGGCTG
 TAGATGGTGACCTGGGTATCCCCTGCTCCTGCCACCCCTTCTCCACACTCCACTCT
 GATTCACCTCTTCTCTGGTTCCCTTTCATCTCTACCTCCACCTGCATTTTCTCTTG
 TCTGGCCCTTCACTCTGCTCCACCAAGGGGCTTGAACCCCTTATTAAGGCCCCAGAT
 GATCCCAGTCACTCCTCTAGGGCAGAAGACTAGAGGCCAGGGCAGCAAGGGACCTGCT
 CATCATATTCCAACCCAGCCAGACTGCCATGTAAGGTTGTGAGGGTGTGACTGCACA
 AGGACATTGTATGCAGGGAGCACTGTTACATCATAGATAAAGCTGATTTGTATATTTAT
 TATGACAATTTCTGGCAGATGTAGGTAAGAGGAAAAGGATCCTTTTCTAATTCACACA
 AAGACTCCTTGTGGACTGGTGTGCCCCGATGCAGCCTGTGGCTGGAGTGGCCAAATA
 GGAGGGAGACTGTGGTAGGGGACGGGAGGCAACACTGCTGTCCACATGACCTCCATTTCC
 CAAAGTCTCTGCTCCAGCAACTGCCCTTCCAGGTGGGTGTGGACACCTGGGAGAAGGT
 CTCCAAGGGAGGGTGCAGCCCTTGGCCGACCCCTCCCTGCTTGCACACTTCCCATC
 TTTGATCCTTCTGAGCTCCACCTCTGGTGGCTCCTCTAGGAAACCAGCTCGTGGGCTGG
 GAATGGGGGAGAGAAGGGAAAAGATCCCCAAGACCCCTGGGGTGGGATCTGAGCTCCA
 CCTCCCTTCCACCTACTGCACTTTCCCTTCCCGCCTTCCAAAACCTGCTTCTTTCAG
 TTTGTAAGTCCGTATTTAAAGTTGTAATAAAAAAATAACCACAAAACAAAACAAAAA
 TATTTATATTCCGTATTTAAAGTTGTAATAAAAAAATAACCACAAAACAAAACAAAAA
 AAAAAAAAAAAAAAAAAA

Restriction Sites: Please inquire

ACCN: NM_002608

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 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_002608.1](#), [NP_002599.1](#)

RefSeq Size: 3373 bp

RefSeq ORF: 726 bp

Locus ID: 5155

UniProt ID: [P01127](#)

Cytogenetics: 22q13.1

Domains: PDGF, PDGF_N

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

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 (1) represents the longer transcript and encodes the longer isoform (1), which contains a signal peptide.