

## Product datasheet for **RC206587**

### PDGF beta (PDGFB) (NM\_002608) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** PDGF beta (PDGFB) (NM\_002608) Human Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** PDGF beta  
**Synonyms:** c-sis; IBGC5; PDGF-2; PDGF2; SIS; SSV  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >RC206587 representing NM\_002608.  
Blue=ORF Red=Cloning site Green=Tag(s)

```
GCTCGTTTGTGAAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGAATCGCTGCTGGCGCTCTTCTGTCTCTCTGCTGCTACCTGCGTCTGGTCAGCGCCGAGGGGGAC
CCCATTCCCGAGGAGCTTATGAGATGCTGAGTGACCACTCGATCCGCTCCTTTGATGATCTCCAACGC
CTGCTGCACGGAGACCCCGAGAGGAAGATGGGGCCGAGTTGGACCTGAACATGACCCGCTCCCACTCT
GGAGGCGAGCTGGAGAGCTTGGCTCGTGAAGAAGGAGCCTGGGTTCCCTGACCATTGCTGAGCCGGCC
ATGATCGCCGAGTCAAGACGCGCACCGAGGTGTTGAGATCTCCCGCGCCTCATAGACCGCACCAAC
GCCAATCTCTGGTGTGGCCGCCCTGTGTGGAGGTGCAGCGCTGCTCCGGCTGCTGCAACAACCGCAAC
GTGCAGTGCCGCCACCCAGGTGCAGCTGCGACCTGTCCAGGTGAGAAAGATCGAGATTGTGCGGAAG
AAGCCAATCTTTAAGAAGGCCACGGTGACGCTGGAAGACCACCTGGCATGCAAGTGTGAGACAGTGGCA
GCTGCACGGCCTGTGACCCGAAGCCCGGGGGTCCCAGGAGCAGCGAGCCAAAACGCCCAAACCTCGG
GTGACCATTCGGACGGTGCAGTCCGCCGGCCCAAGGGCAAGCACCGGAAATTAAGCACACGCAT
GACAAGACGGCACTGAAGGAGACCCTTGGAGCC
AGCGGACCGACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGAT
ATCCTGGATTACAAGGATGACGACGATAAGGTTTAA
```

**Protein Sequence:** >Peptide sequence encoded by RC206587  
Blue=ORF Red=Cloning site Green=Tag(s)

```
MNRCWALFLSLCCYLRLVSAEGDPIPEELYEMLSDHSIRSFDDLQRLHGDPEEDGAELDLNMTRSHS
GGELESLARGRRSLGSLTIAEPAMIAECKTRTEVFEISRRLIDRTNANFLVWPPCQVEVQRCSGCCNNRN
VQCRPTQVQLRPVQVRKIEIVRKKPIFKKATVTLEDHLACKCETVAAARPVTRSPGGSQEQRAKTPQTR
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SGPTRRTRPLEQKLISEEDLAANDILDYKDDDDKV
```

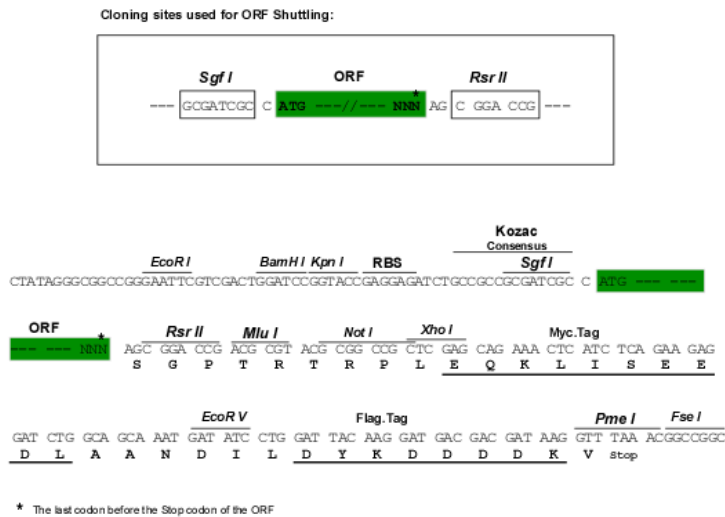


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**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6183\\_b10.zip](https://cdn.origene.com/chromatograms/mk6183_b10.zip)

**Restriction Sites:** SgfI-RsrII

**Cloning Scheme:**



**ACCN:** NM\_002608

**ORF Size:** 723 bp

**OTI Disclaimer:** 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:**

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.

**Note:** Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

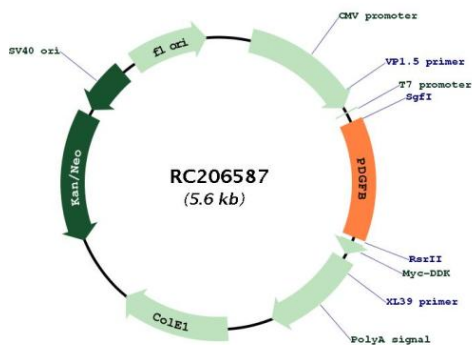
**RefSeq:** [NM\\_002608.4](#)

**RefSeq Size:** 3393 bp

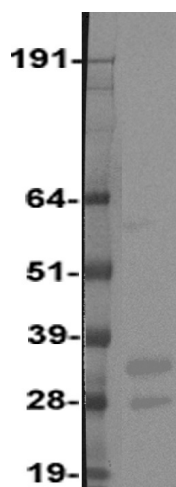
**RefSeq ORF:** 726 bp  
**Locus ID:** 5155  
**UniProt ID:** [P01127](#)  
**Cytogenetics:** 22q13.1  
**Domains:** PDGF, PDGF\_N  
**Protein Families:** Druggable Genome  
**Protein Pathways:** Cytokine-cytokine receptor interaction, Focal adhesion, Gap junction, Glioma, MAPK signaling pathway, Melanoma, Pathways in cancer, Prostate cancer, Regulation of actin cytoskeleton, Renal cell carcinoma  
**MW:** 27.3 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]

### Product images:



Circular map for RC206587



Western blot validation of overexpression lysate (Cat# [LY400920]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC206587 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).