

Product datasheet for **RG206587**

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:	TurboGFP
Symbol:	PDGF beta
Synonyms:	c-sis; IBGC5; PDGF-2; PDGF2; SIS; SSV
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG206587 representing NM_002608 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAATCGCTGCTGGGCGCTCTTCCTGTCTCTGCTGCTACCTGCGTCTGGTCAGCGCCGAGGGGACC
CCATCCCAGGAGCTTTATGAGATGCTGAGTGACCACTCGATCCGCTCCTTTGATGATCTCCAACGCCT
GCTGCACGGAGACCCCGGAGAGGAAGATGGGGCCGAGTTGGACCTGAACATGACCCGCTCCCACTCTGGA
GGCGAGCTGGAGAGCTTGCTCGTGAAGAAGGAGCCTGGGTTCCCTGACCATTGCTGAGCCGGCCATGA
TCGCCGAGTGCAAGACGCGCACCGAGGTGTTGAGATCTCCGGCGCCTCATAGACCGCACCAACGCCAA
CTTCTGGTGTGGCCGCCCTGTGTGGAGGTGCAGCGCTGCTCCGGCTGCTGCAACAACCGCAACGTGCAG
TGCCGCCCCACCCAGGTGACGCTGCGACCTGTCCAGGTGAGAAAGATCGAGATTGTGCGGAAGAAGCCAA
TCTTTAAGAAGGCCACGGTGACGCTGGAAGACCACCTGGCATGCAAGTGTGAGACAGTGGCAGCTGCACG
GCCTGTGACCCGAAGCCCGGGGGTTCAGGAGCAGCGAGCCAAAACGCCCAAACCTCGGGTGACCATT
CGGACGGTGCGAGTCCGCCGGCCCCCAAGGGCAAGCACCGGAAATTCAGCACACGCATGACAAGACGG
CACTGAAGGAGACCCTTGAGCC

AG**CGGACCG**ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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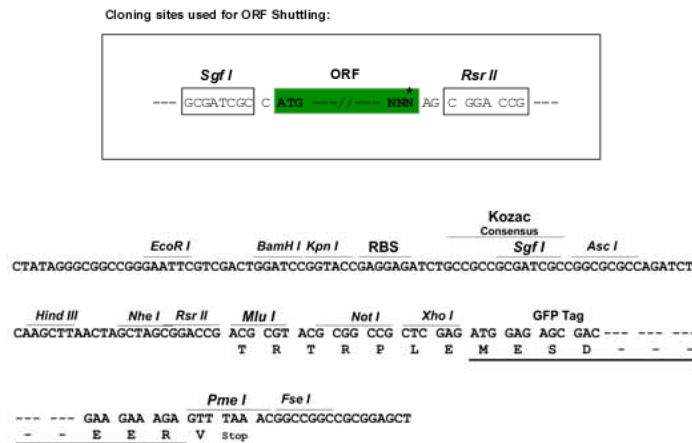
Protein Sequence: >RG206587 representing NM_002608
 Red=Cloning site Green=Tags(s)

MNRCWALFLSLCCYLRLVSAEGDPIPEELYEMLSDHSIRSFDLQRL LHGDPGEEDGAELDLNMTRSHSG
 GELESLARGRRSLGSLTIAEPAMIAECKTRTEVFEISRRLIDRTNANFLVWPPCQVEVQRCSCCNRNVQ
 CRPTQVQLRPVQVRKIEIVRKKPIFKKATVTLEDHLACKCETVAAARPVTRSPGGSQEQRAKTPQTRVTI
 RTVRRVRRPPKGRKFKHDKTALKETLGA

SGPTRRRLE - GFP Tag - V

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.

RefSeq: [NM_002608.4](#)

RefSeq Size: 3373 bp

RefSeq ORF: 726 bp

Locus ID: 5155

UniProt ID: [P01127](#)

Cytogenetics: 22q13.1

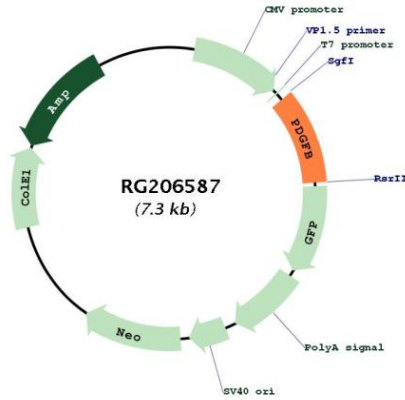
Domains: PDGF, PDGF_N

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]

Product images:



Circular map for RG206587