

# Product datasheet for RC206377L4

#### OriGene Technologies, Inc.

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## PDGF Receptor beta (PDGFRB) (NM\_002609) Human Tagged Lenti ORF Clone

**Product data:** 

**Product Type:** Expression Plasmids

Product Name: PDGF Receptor beta (PDGFRB) (NM 002609) Human Tagged Lenti ORF Clone

Tag: mGFP

Symbol: PDGF Receptor beta

Synonyms: CD140B; IBGC4; IMF1; JTK12; KOGS; PDGFR; PDGFR-1; PDGFR1; PENTT

Mammalian Cell Puromycin

Selection:

Vector:

pLenti-C-mGFP-P2A-Puro (PS100093)

E. coli Selection: Chloramphenicol (34 ug/mL)

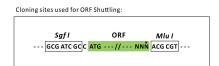
ORF Nucleotide The ORF insert of this clo

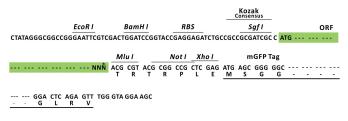
Sequence:

The ORF insert of this clone is exactly the same as(RC206377).

**Restriction Sites:** Sgfl-Mlul

**Cloning Scheme:** 





<sup>\*</sup> The last codon before the Stop codon of the ORF

ACCN: NM\_002609

ORF Size: 3318 bp





**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 clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

Components:

Cytogenetics:

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.

NM 002609.3 RefSeq:

RefSeq Size: 5718 bp RefSeq ORF: 3321 bp Locus ID: 5159 **UniProt ID:** P09619

5q32 Domains: pkinase, TyrKc, S\_TKc, ig, IGc2, IG

**Protein Families:** Druggable Genome, ES Cell Differentiation/IPS, Protein Kinase, Transmembrane

**Protein Pathways:** Calcium signaling pathway, Colorectal cancer, Cytokine-cytokine receptor interaction, Focal

adhesion, Gap junction, Glioma, MAPK signaling pathway, Melanoma, Pathways in cancer,

Prostate cancer, Regulation of actin cytoskeleton

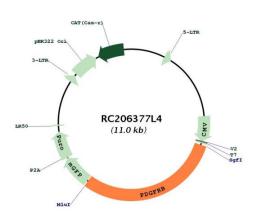
MW: 123.8 kDa



#### **Gene Summary:**

The protein encoded by this gene is a cell surface tyrosine kinase receptor for members of the platelet-derived growth factor family. These growth factors are mitogens for cells of mesenchymal origin. The identity of the growth factor bound to a receptor monomer determines whether the functional receptor is a homodimer (PDGFB or PDGFD) or a heterodimer (PDGFA and PDGFB). This gene is essential for normal development of the cardiovascular system and aids in rearrangement of the actin cytoskeleton. This gene is flanked on chromosome 5 by the genes for granulocyte-macrophage colony-stimulating factor and macrophage-colony stimulating factor receptor; all three genes may be implicated in the 5-q syndrome. A translocation between chromosomes 5 and 12, that fuses this gene to that of the ETV6 gene, results in chronic myeloproliferative disorder with eosinophilia. [provided by RefSeq, Aug 2017]

### **Product images:**



Circular map for RC206377L4