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Product datasheet for RG222432

PDGF beta (PDGFB) (NM_033016) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PDGF beta (PDGFB) (NM_033016) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	PDGFB
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:	>RG222432 representing NM_033016 Red=Cloning site Blue=ORF Green=Tags(s) TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC GCCGCGATCGCC ATGTTTATCATGGGCCTCGGGGACCCCATTCCCGAGGAGCTTTATGAGATGCTGAGTGACCACTCGATCC GCTCCTTTGATGATCTCCAACGCCTGCTGCACGGAGACCCCGGAGAGGAAGATGGGGCCGAGTTGGACCT GAACATGACCCGCTCCCACTCTGGAGGCGAGCTGGAGAGCTTGGCTCGTGGAAGAAGGAGCCTGGGTTCC CTGACCATTGCTGAGCCGGCCATGATCGCCGAGTGCAAGACGCGCACCGAGGTGTTCGAGATCTCCCGGC GCCTCATAGACCGCACCAACGCCAACTTCCTGGTGTGGCCGCCCTGTGTGGAGGTGCAGCGCTGCTCCGG CTGCTGCAACAACCGCAACGTGCAGTGCCGCCCCACCCAGGTGCAGCTGCGACCTGTCCAGGTGAGAAAG ATCGAGATTGTGCGGAAGAAGCCAATCTTTAAGAAGGCCACGGTGACGCTGGAAGACCACCTGGCATGCA AGTGTGAGACAGTGGCAGCTGCACGGCCTGTGACCCGAAGCCCGGGGGGTTCCCAGGAGCAGCGAGCCAA AACGCCCCAAACTCGGGTGACCATTCGGACGGTGCGAGTCCGCCGGCCCCCCAAGGGCAAGCACCGGAAA TTCAAGCACACGCATGACAAGACGGCACTGAAGGAGACCCTTGGAGCC ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

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Protein Sequence:

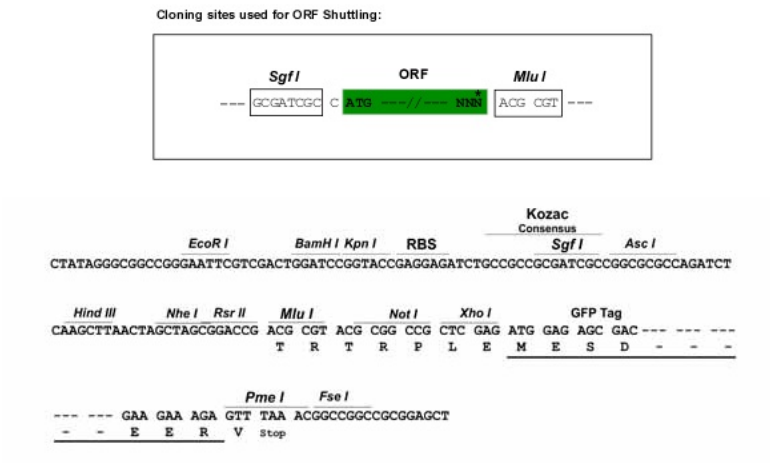
>RG222432 representing NM_033016
Red=Cloning site Green=Tags(s)

MFIMGLGDPIPEELYEMLSDHSIRSFDDLQRLLHGDPGEEDGAELDLNMTRSHSGGELESLARGRRSLGS
LTIAEPAMIAECKTRTEVFEISRRLIDRTNANFLVWPPCVEVQRCSGCCNNRNVQCRPTQVQLRPVQVRK
IEIVRKKPIFKKATVTLEDHLACKCETVAAARPVTRSPGGSQEQRAKTPQTRVTIRTVRVRRPPKGKHRK
FKHTHDKTALKETLGA

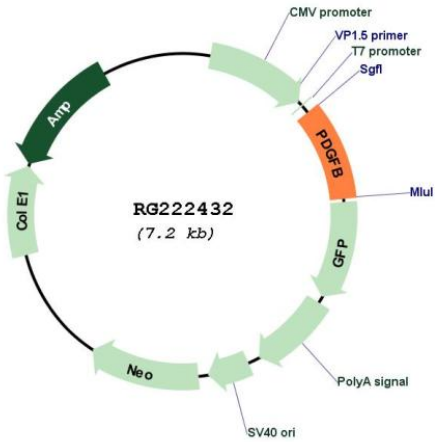
TRTRPLE – GFP Tag – V

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_033016

ORF Size: 678 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_033016.3, NP_148937.1
RefSeq Size:	2378 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
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]