

Product datasheet for **RG214164**

PDGF AA (PDGFA) (NM_033023) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: PDGF AA (PDGFA) (NM_033023) Human Tagged ORF Clone
Tag: TurboGFP
Symbol: PDGFA
Synonyms: PDGF-A; PDGF1
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG214164 representing NM_033023
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAGGACCTTGGCTTGCCTGCTCCTCGGCTGCGGATACCTCGCCCATGTTCTGGCCGAGGAAGCCG
AGATCCCCCGGAGGTGATCGAGAGGCTGGCCCGAGTCAGATCCACAGCATCCGGGACCTCCAGCGACT
CCTGGAGATAGACTCCGTAGGGAGTGAGGATTCTTTGGACACCAGCTGAGAGCTCACGGGGTCCATGCC
ACTAAGCATGTGCCCGAGAAGCGGCCCTGCCATTTCGGAGGAAGAGAAGCATCGAGGAAGCTGTCCCCG
CTGTCTGAAGACCAGGACGGTCATTTACGAGATTCCTCGGAGTCAGGTCGACCCACGTCGGCCAACTT
CCTGATCTGGCCCCGTGCGTGGAGGTGAAACGCTGCACCGGCTGCTGCAACACGAGCAGTGTCAAGTGC
CAGCCCTCCCGCTCCACCACCGCAGCGTCAAGGTGGCCAAGGTGGAATACGTCAGGAAGAAGCCAAAAT
TAAAAGAAGTCCAGGTGAGGTTAGAGGACATTTGGAGTGCCTGCGCGACCACAAGCCTGAATCCGGA
TTATCGGGAAGAGGACACGGATGTGAGG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG214164 representing NM_033023
Red=Cloning site Green=Tags(s)

MRTLACLALLLGGCYLAHVLAEEAEIPREVIERLARSQIHSIRDLQRLLEIDSVGSEDSLDTSLRAHGVHA
TKHVPEKRPLPIRRKRSIEEAVPAVCKTRTVIYEIPRSQVDPTSANFLIWPPCVEVKRCTGCCNTSSVKC
QPSRVHHRSVKVAKVEYVRKKPKLKEVQVRLLEHLEACATTSLNPDYREEDTDVR

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

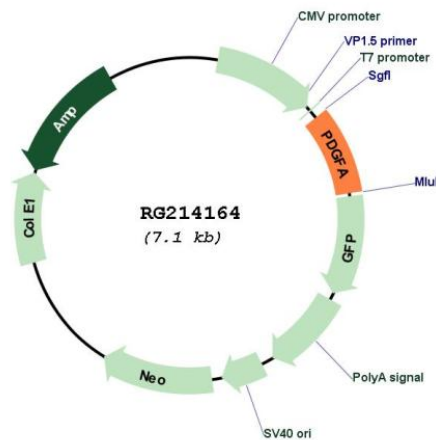


[View online »](#)

Cloning Scheme:



Plasmid Map:



ACCN: NM_033023

ORF Size: 588 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_033023.4](#), [NP_148983.1](#)

RefSeq Size: 2749 bp

RefSeq ORF: 591 bp

Locus ID: 5154

UniProt ID: [P04085](#)

Cytogenetics: 7p22.3

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

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 A, which can homodimerize, or alternatively, heterodimerize with the related platelet-derived growth factor subunit B. These proteins bind and activate PDGF receptor tyrosine kinases, which play a role in a wide range of developmental processes. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Oct 2015]