

Product datasheet for **RG214470**

PGP (NM_001042371) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: PGP (NM_001042371) Human Tagged ORF Clone
Tag: TurboGFP
Symbol: PGP
Synonyms: AUM; G3PP; PGPase
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG214470 representing NM_001042371
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGCGGCGGGAGGCCGGTGGCGACGACGCCCGCTGCGTGCGGCTGAGCGCCGAGCGGGCACAGGCGC
 TGCTGGCCGACGTGGACACGCTGCTGTTTCGACTGCGACGGCGTGCTGTGGCGGGGAGACCGCGTGCC
 TGGCGCGCCGAGGCCCTGCGGGCGCTGCGAGCCCGGCAAGCGCCTGGGCTTCATCACCACAACAGC
 AGCAAGACCCGCGCTGCCTACGCCGAGAAGCTGCGGCGCCTGGGCTTCGCGGCCCGCGGGGCCGCGC
 CCAGCCTGGAGGTCTTCGCGACGGCCTACTGCACCGCCTCTACCTGCGCCAGCGCTGGCCGGCGCCCC
 CGCGCCCAAGGCCTACGTGCTGGCAGCCAGCCCTGGCCGCGGAGCTGGAGGCCGTGGGCGTCGCCAGC
 GTGGGCGTGGGGCCGAGCCACTGCAGGGCGAGGGTCCCGGCGACTGGCTGCACGCGCCGCTGGAGCCCG
 ACGTGCGCGCGGTGGTGGTGGGCTTTGACCCGCACTTCAGCTACATGAAGCTCACCAGGCCCTGCGCTA
 CCTGCAGCAGCCCGGCTGCCTGCTCGTGGGCACCAACATGGACAACCGGCTTCGCTTGAGAACGGCCGC
 TTCATCGCGGGTACCGGGTGTCTGGTCCGAGCCGTGGAGATGGCCGCCAGCGCCAGGCCGACATCATCG
 GGAAGCCAGCCGCTTCATTTTCGACTGCGTGTCCAGGAATACGGCATCAACCCGAGCGCACCGTCAT
 GGTGGGAGACCGCTGGACACAGACATCCTCCTAGGCGCCACCTGTGGCTGAAGACCATCTGACCCTC
 ACCGGAGTCTCCACTTAGGGATGTGAAGAATAATCAGGAAAGTGACTGCGTGTCTAAGAAGAAAATGG
 TCCTGACTTCTATGTTGACAGCATAGCCGACCTTTTGCCTGCCCTTCAAGGT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG214470 representing NM_001042371
 Red=Cloning site Green=Tags(s)

MAAAEAGGDDARCVRLSAERAQALLADVDTLLFDCDGVLRGETAVPGAPEALRALRARGKRLGFITNNS
 SKTRAAAYAEKLRRLGFGGPAGPGASLEVFGTAYCTALYLRQRLAGAPAPKAYVLGSPALAAELEAVGVAS
 VGVGPEPLQEGEPGDWLHAPLEPDVRAVVVGFDPHFSYMKLTKALRYLQQPGCLLVGTNMDNRLPLENDR
 FIAGTGCLVRAVEMAAQRQADIIGKPSRFIFDCVSQEYGINPERTVMVGDRLDITDILLGATCGLKILTLL
 TGVSTLGDVKNNQESDCVSKKMKMVPDFYVDSIADLLPALQG

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001042371

ORF Size: 963 bp

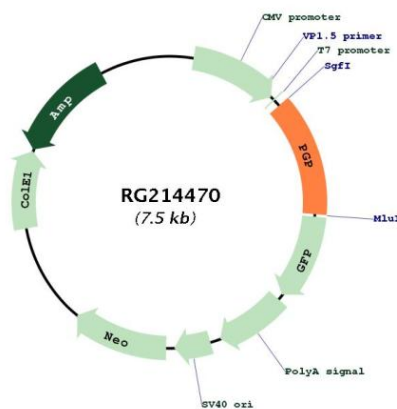
OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA 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:** 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_001042371.3](#)
- RefSeq Size:** 1041 bp
- RefSeq ORF:** 966 bp
- Locus ID:** 283871
- UniProt ID:** [A6NDG6](#)
- Cytogenetics:** 16p13.3
- Protein Pathways:** Glyoxylate and dicarboxylate metabolism, Metabolic pathways
- Gene Summary:** Glycerol-3-phosphate phosphatase hydrolyzing glycerol-3-phosphate into glycerol. Thereby, regulates the cellular levels of glycerol-3-phosphate a metabolic intermediate of glucose, lipid and energy metabolism. Was also shown to have a 2-phosphoglycolate phosphatase activity and a tyrosine-protein phosphatase activity. However, their physiological relevance is unclear (PubMed:26755581). In vitro, has also a phosphatase activity toward ADP, ATP, GDP and GTP (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RG214470