

Product datasheet for **MG226902**

Pttg1 (NM_001131054) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Pttg1 (NM_001131054) Mouse Tagged ORF Clone
Tag: TurboGFP
Symbol: Pttg1
Synonyms: AW555095; C87862; Pttg; Pttg3
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >MG226902 representing NM_001131054
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCTACTCTTATCTTTGTTGATAAGGATAATGAAGAACCCGGCCGCGTTTGGCATCTAAGGATGGGT
TGAAGCTGGGCACTGGTGTCAAGGCCTTAGATGGGAAATTGCAGGTTTCAACGCCTCGAGTCGGCAAAGT
GTTCAATGCTCCAGCCGTGCCTAAAGCCAGCAGAAAGGCTTTGGGACAGTCAACAGAGTTGCCGAAAAG
CCTATGAAGACTGGCAAACCCCTCAACAAAACAGCCGACCTTGACTGGGAAAAAGATCACCGAGAAGT
CTACTAAGACACAAAGTTCTGTTCTGCTCCTGATGATGCCTACCCAGAAATAGAAAAGTTCTTCCCTTT
CAATCCTCTAGACTTTGAGAGTTTTGACCTGCCTGAGGAGCACCAGATCTCACTTCTCCCCTTGAATGGC
GTGCTCTCATGACCCTGAATGAAGAGAGAGGGCTGGAGAAGCTGCTGCATCTGGGCCCCCTAGCCCTC
TGAAGACACCCTTTCTATCATGGGAATCTGATCCGCTGTACTCTCTCCAGTGCCTCTCCACTCTGGA
TGTTGAATTGCCGCTGTTTGTACGATGCAGATATT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG226902 representing NM_001131054
Red=Cloning site Green=Tags(s)

MATLIFVDKDNEEPGRRLASKDGLKLGTVKALDGKLVQSTPRVGKVFNAPAVPKASRKALGTVNRVAEK
PMKTGKPLQPKQPTLTGKKITEKSTKTQSSVPAPDDAYPEIEKFFPNPLDFESFDLPEEHQISLLPLNG
VPLMTLNEERGLEKLLHLGPPSPLKTPFLSWESDPLYSPPSALSTLDVELPPVCYDADI

TRTRPLE - GFP Tag - V

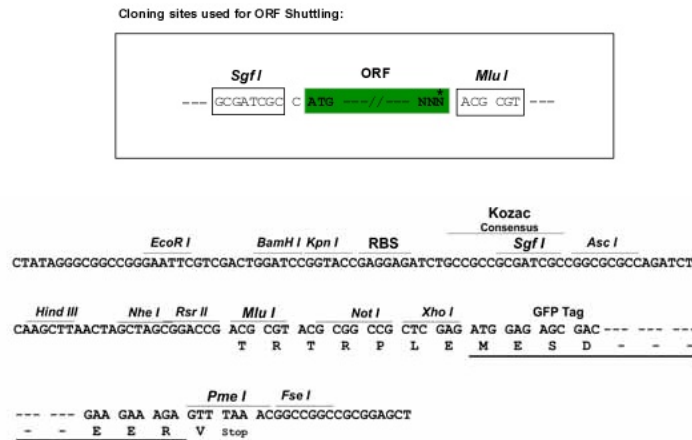
Chromatograms: https://cdn.origene.com/chromatograms/ja2536_h06.zip



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Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001131054

ORF Size: 597 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.

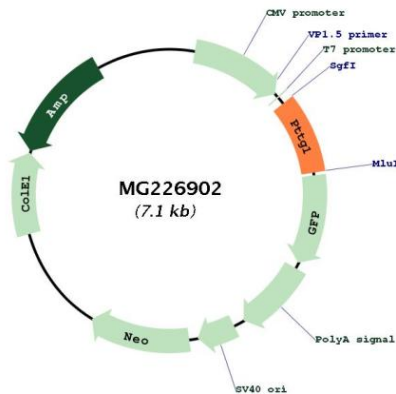
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

- 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_001131054.2](#)
 RefSeq Size: 748 bp
 RefSeq ORF: 600 bp
 Locus ID: 30939
 UniProt ID: [Q9CQJ7](#)
 Cytogenetics: 11 B1.1
 Gene Summary:

Regulatory protein, which plays a central role in chromosome stability, in the p53/TP53 pathway, and DNA repair. Probably acts by blocking the action of key proteins. During the mitosis, it blocks Separase/ESPL1 function, preventing the proteolysis of the cohesin complex and the subsequent segregation of the chromosomes. At the onset of anaphase, it is ubiquitinated, conducting to its destruction and to the liberation of ESPL1. Its function is however not limited to a blocking activity, since it is required to activate ESPL1. Negatively regulates the transcriptional activity and related apoptosis activity of p53/TP53. The negative regulation of p53/TP53 may explain the strong transforming capability of the protein when it is overexpressed. May also play a role in DNA repair via its interaction with Ku, possibly by connecting DNA damage-response pathways with sister chromatid separation (By similarity). [UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MG226902