

Product datasheet for RR214617

Pttg1 (NM_022391) Rat Tagged ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: Pttg1 (NM_022391) Rat Tagged ORF Clone

Tag: Myc-DDK

Symbol: Pttg1

Synonyms: Pttg

Mammalian Cell Neomycin

Selection:

Vector: pCMV6-Entry (PS100001)

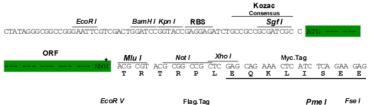
E. coli Selection: Kanamycin (25 ug/mL)

Restriction Sites: Sgfl-Mlul

Cloning Scheme:

Cloning sites used for ORF Shuttling:





GAT CTG GCA GCA AAT GAT ATC CTG GAT TAC AAG GAT GAC GAC GAT AAG GTT TAA ACGGCCGGCC

D L A A N D I L D Y K D D D D K V stop

ACCN: NM_022391

ORF Size: 597 bp



OriGene Technologies, Inc. 9620 Medical Center Drive, Ste 200

CN: techsupport@origene.cn

Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com

^{*} The last codon before the Stop codon of the ORF

ORIGENE

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: <u>NM 022391.3</u>

 RefSeq Size:
 959 bp

 RefSeq ORF:
 600 bp

 Locus ID:
 64193

 UniProt ID:
 P97613

 Cytogenetics:
 10q21

MW: 21.6 kDa

Gene Summary: Regulatory protein, which plays a central role in chromosome stability, in the p53/TP53

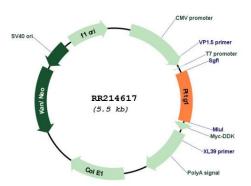
pathway, and DNA repair. Probably acts by blocking the action of key proteins. During the mitosis, it blocks Separase/ESPL1 function, preventing the proteolysis of the cohesin complex and the subsequent segregation of the chromosomes. At the onset of anaphase, it is ubiquitinated, conducting to its destruction 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 RR214617