

Product datasheet for **RG238843**

RPC62 (POLR3C) (NM_001303456) Human Tagged ORF Clone

Product data:

| | |
|---------------------------|--|
| Product Type: | Expression Plasmids |
| Product Name: | RPC62 (POLR3C) (NM_001303456) Human Tagged ORF Clone |
| Tag: | TurboGFP |
| Symbol: | POLR3C |
| Synonyms: | C82; RPC3; RPC62 |
| Mammalian Cell Selection: | Neomycin |
| Vector: | pCMV6-AC-GFP (PS100010) |
| E. coli Selection: | Ampicillin (100 ug/mL) |



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ORF Nucleotide Sequence:

>RG238843 representing NM_001303456.
 Blue=ORF Red=Cloning site Green=Tag(s)

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GCTCGTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGGCCGGGAATTCGTGCGACTG
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ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAAAC
  
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Protein Sequence:

>Peptide sequence encoded by RG238843
 Blue=ORF Red=Cloning site Green=Tag(s)

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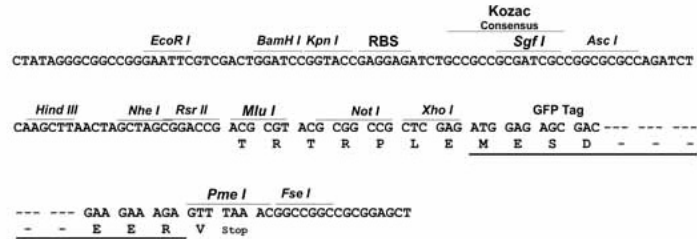
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Restriction Sites:

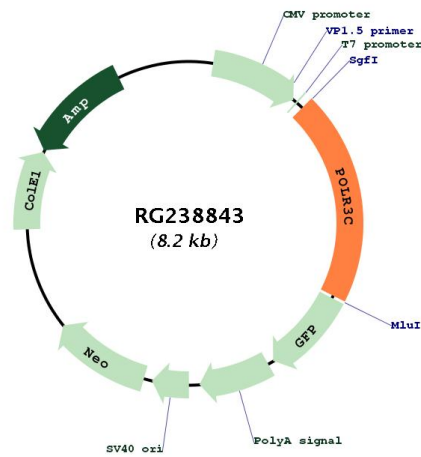
Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:



| | |
|--------------------------|---|
| ACCN: | NM_001303456 |
| ORF Size: | 1641 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). |
| RefSeq: | NM_001303456.1 , NP_001290385.1 |
| RefSeq Size: | 3722 bp |
| RefSeq ORF: | 1644 bp |
| Locus ID: | 10623 |
| UniProt ID: | Q9BUI4 |
| Cytogenetics: | 1q21.1 |
| Protein Families: | Transcription Factors |
| Protein Pathways: | Cytosolic DNA-sensing pathway, Metabolic pathways, Purine metabolism, Pyrimidine metabolism, RNA polymerase |
| MW: | 62.6 kDa |
| Gene Summary: | DNA-dependent RNA polymerase catalyzes the transcription of DNA into RNA using the four ribonucleoside triphosphates as substrates. Specific core component of RNA polymerase III which synthesizes small RNAs, such as 5S rRNA and tRNAs. May direct with other members of the subcomplex RNA Pol III binding to the TFIIIB-DNA complex via the interactions between TFIIIB and POLR3F. May be involved either in the recruitment and stabilization of the subcomplex within RNA polymerase III, or in stimulating catalytic functions of other subunits during initiation. Plays a key role in sensing and limiting infection by intracellular bacteria and DNA viruses. Acts as nuclear and cytosolic DNA sensor involved in innate immune response. Can sense non-self dsDNA that serves as template for transcription into dsRNA. The non-self RNA polymerase III transcripts, such as Epstein-Barr virus-encoded RNAs (EBERs) induce type I interferon and NF- Kappa-B through the RIG-I pathway. Preferentially binds single-stranded DNA (ssDNA) in a sequence-independent manner (PubMed:21358628).[UniProtKB/Swiss-Prot Function] |