

Product datasheet for **RG218588**

POLR3E (NM_018119) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	TurboGFP
Symbol:	POLR3E
Synonyms:	C37; RPC5; SIN
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



ORF Nucleotide Sequence: >RG218588 representing NM_018119
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
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ATGGCCAATGAAGAGGATGACCCAGTTGTACAGGAGATCGATGTGTAAGTGGCCAAGAGTCTGGCGGAAA
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ACGCGCCGCTCGAG - GFP Tag - GTTTAA

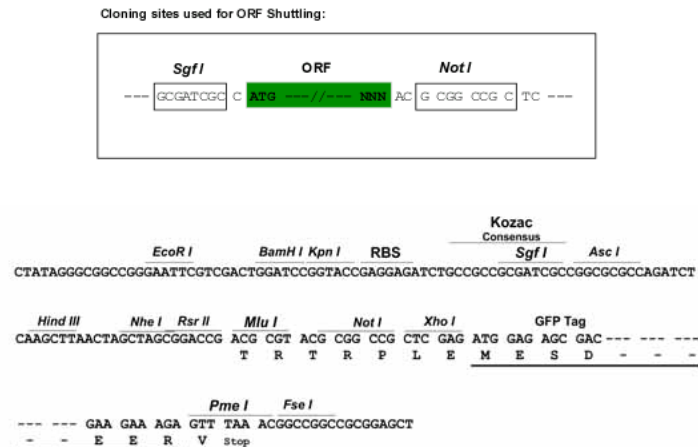
Protein Sequence: >RG218588 representing NM_018119
 Red=Cloning site Green=Tags(s)

MANEEDDPVQEIYVYLAESLAELYLQYVVRPASMTYDDIPLHSAKIKPKQKQVELEMAIDTLNPNYC
 RSKGEQIALNVDGACADETSTYSSKLMQKTFCSSTTSNTSRYAAALYRQGLHLPLHGLQLRPSFS
 YLDKADAKHREAREANEAGDSSQDEADDVKQITVRFSRPESEQARQRRVQSYEFLQKKHAEPPWVHLHY
 YGLRDSRSEHERQYLLCPGSSGVENTELVKSPSEYLMMLMPPSQEEEDKPVAPSNVLSMAQLRTLPLAD
 QIKILMKNVVMFPANLMSLLGPSIDSVAVLRGIQKVAMLVQGNWVVKSDILYPKSSSPHSGVPVAVLC
 RGRDFVMWKFQSRWVVRKEVATVTKLCAEDVKDFLEHMAVVRINKGWEFILPYDGEFIKKHPDVVQRQH
 MLWTGIQAKLEKYNLVKETMPKKPDAQSGPAGLVCGDQRIQVAKTKAQNHALLERELQRRKEQLRVPA
 VPPGVRIKEEPPVEEGEEDDEEQAEEEPMDTSPSGLHSLKLANGLPLGRAAGTDSFNHPPQGCSTPVAR
 ELKAFVEATFQRQFVLTSELKRLFNHLASLPPGHTLFSGISDRMLQDTVLAAGCKQILVPFPQTAAS
 PDEQKVFALWESGDMSDQHRQVLLLEIFSKNYRVRNMIQSRLTQECGEDLSKQEVVKVLDCCVSYGGMW
 YLKGTQVS

TRPLE - GFP Tag - V

Restriction Sites: SgfI-NotI

Cloning Scheme:



ACCN: NM_018119

ORF Size: 2124 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

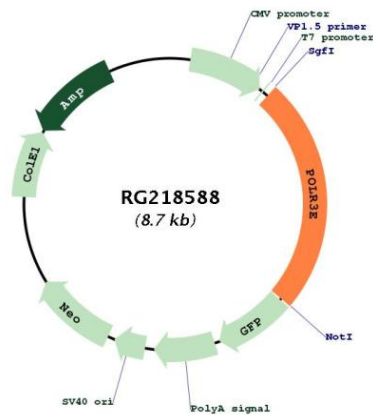
RefSeq: [NM_018119.4](#)

RefSeq Size: 2640 bp
 RefSeq ORF: 2127 bp
 Locus ID: 55718
 UniProt ID: [Q9NVU0](#)
 Cytogenetics: 16p12.2
 Domains: Sin_N

Protein Families: Transcription Factors

Gene Summary: DNA-dependent RNA polymerase catalyzes the transcription of DNA into RNA using the four ribonucleoside triphosphates as substrates. Specific peripheric component of RNA polymerase III which synthesizes small RNAs, such as 5S rRNA and tRNAs. Essential for efficient transcription from both the type 2 VAI and type 3 U6 RNA polymerase III promoters. 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 (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RG218588