

Product datasheet for **RG234718**

POLR3E (NM_001258033) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	POLR3E (NM_001258033) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	POLR3E
Synonyms:	C37; RPC5; SIN
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide
Sequence:**

>RG234718 representing NM_001258033
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGC**C

ATGGCCAATGAAGAGGATGACCCAGTTGTACAGGAGATCGATGTGTACTTGGCCAAGAGTCTGGCGGAAA
 AGCTGTATCTATTTCAAGTACCCTGTGCGTCCAGCCTCGATGACCTACGATGACATTCCGCACCTCTCAGC
 CAAGATCAAGCCCAAGCAGCAGAAGGTAGAGCTTGAGATGGCCATCGACACCCTGAACCCCAACTATTGC
 CGCAGCAAAGGGGAGCAGATTGCGCTGAACGTGGACGGGGCTGCGCCGACGAGACCAGCAGTATTCTCT
 CGAAGCTGATGGACAAGCAGACCTTCTGCTCTTCCAGACCACCAGTAACACATCCCCTTATGCCGTGCT
 ACTCTACAGGCAAGGTGAGCTCCACCTGACACCTTTACATGGCATCCTGCAGCTGCGGCCAGCTTCTCC
 TACCTGGATAAGGCTGACGCCAAGCACCAGGAGAGGGAGGCGGCCAACGAGGCAGGGGACTTTCACAGG
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 GCGCCGTGTGAGTCTATGAGTTCCTGCAGAAGAAGCACGAGAGGAGCCCTGGGTCCACCTGCATTAC
 TATGGCCTGAGGGACAGTCGCTCTGAGCATGAGCGTCAGTACCTGCTGTGCCCGGCTCAAGCGGGGTGG
 AGAACACGGAGCTCGTCAAGTCACCCAGTGAGTACCTGATGATGCTGATGCCACCCAGCCAGGAGGAGGA
 GAAAGACAAGCCTGTGGCCCCAGCAACGTCCTGTGATGGCCAGCTGCGCACGCTGCCCTGGCCGAT
 CAGATCAAGATCCTGATGAAGATGTGAAGTTCATGCCTTTTGCCAACTTGATGAGCCTCCTGGGCCCT
 CCATCGATTCCGTGGCTGTTCTGCGGGGCATCCAGAAGGTGGCGATGTTGGTCCAAGGGAAGTGGTGCT
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 AGGGGCCGAGACTTCGTTATGTGAAGTTCACGCAGAGCCGCTGGGTGGTTAGGAAAGAGGTGGCAACCG
 TGACCAAACCTCTGCGCCGAGGATGTGAAGGACTTCCTGGAGCACATGGCCGTGGTGAGGATCAACAAAGG
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 ACAGGACACGGTGTGCGCGCCGGTTGCAAGCAGATACTGGTGCCTTTTCCCCCCAGACTGCTGCTTCC
 CCGGATGAGCAGAAGGTGTTGCCCTCTGGGAGTCTGGAGACATGAGTGATCAGTCTCGGTTGACTCAAG
 AGTGTGGAGAAGATCTCAGTAAACAGGAGGTGGATAAAGTACTAAAGGACTGCTGTGAAGCTATGGTGG
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AC**CGGCCG**CTCGAG – GFP Tag – GTTTAA

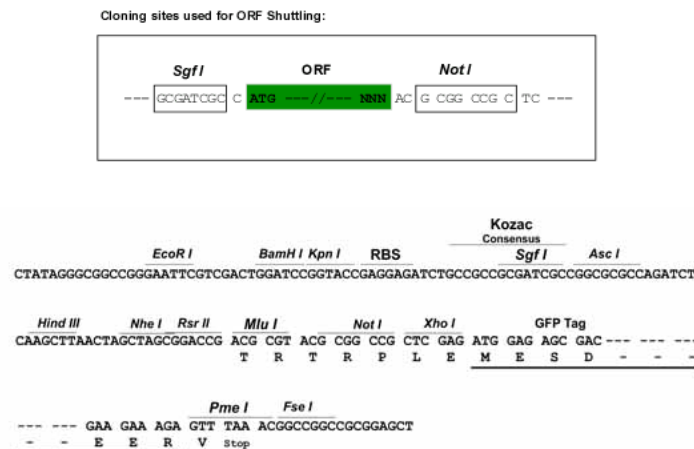
Protein Sequence: >RG234718 representing NM_001258033
 Red=Cloning site Green=Tags(s)

MANEEDDPVVQEIDVYLAKSLAEKLYLFQYPVRPASMTYDDIPHLSAKIKPKQKQVELEMAIDTLNPNYC
 RSKGEQIALNVDGACADETSTYSSKLMKQTFCSSQTSNTSRYAAALYRQGEHLTPLHGILQLRPSFS
 YLDKADAKHREREANEAGDSSQDEAEDDVKQITVRFSRPESEQRQRRVQSYEFLLQKKHAEPPWVHLHY
 YGLRDSRSEHERQYLLCPGSSGVENTELVKSPSEYLMMLMPPSQEEEDKPVAPSNVLSMAQLRTLPLAD
 QIKILMKNVNVKMPFANLMSLLGPSIDSVAVLRGIQKVAMLVQGNWVVKSDILYPKDSSSHSGVPAEVL
 RGRDFVMWKFQSRWVRKEVATVTKLCAEDVKDFLEHMAVVRINKGWEFILPYDGEFIKKHPDVVQRQH
 MLWTGIQAKLEKYYNLVKETMPKKPDAQSGPAGLVCGDQRIQVAKTKAQNHALLERELQRRKEQLRVPA
 VPPGVRIKEEPVSEEGEEDEEQEAEPEMDTSPSGLHSLANGLPLGRAAGTDSFNHPPQGCASTPVAR
 ELKAFVEATFQRQFVLTSELKRLFNHLASLPPGHTLFSGISDRMLQDTVLAAGCKQILVPFPQTAA
 PDEQKVFALWESGDMSDQSRLTQECGEDLSKQEVKVLKDCCVSYGGMWYLKGTVQS

TRPLE - GFP Tag - V

Restriction Sites: SgfI-NotI

Cloning Scheme:



ACCN: NM_001258033

ORF Size: 2061 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.

RefSeq: [NM_001258033.2](#)

RefSeq Size: 3682 bp

RefSeq ORF: 2064 bp

Locus ID: 55718

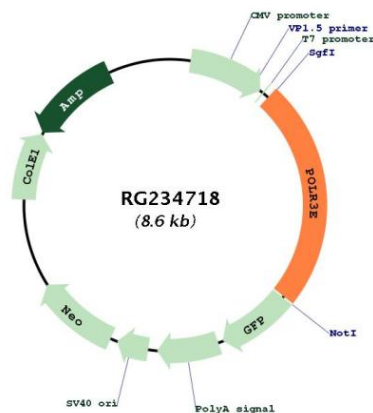
UniProt ID: [Q9NVU0](#)

Cytogenetics: 16p12.2

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 RG234718