

## Product datasheet for **RG236540**

### **POLR3H (NM\_001282885) Human Tagged ORF Clone**

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** POLR3H (NM\_001282885) Human Tagged ORF Clone  
**Tag:** TurboGFP  
**Symbol:** POLR3H  
**Synonyms:** C25; RPC8; RPC22.9  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**ORF Nucleotide Sequence:** >RG236540 representing NM\_001282885.  
Blue=ORF Red=Cloning site Green=Tag(s)

```
GCTCGTTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGTTTCGTCTGGTGGAAATGGTGGACACCGTCCGGATCCCCCTTGGCAGTTTGAGAGGAAGCTCAAC
GACTCCATTGCCGAGGAGCTGAACAAGAAGTTGGCCAACAAGGTCGTGTACAACGTGGGACTCTGCATT
TGTCTGTTTGATACACCAAACGGAGGATGCCTATGTATTCCCTGGGGATGGCGCATCACACACAAA
GTCCATTTTCGCTGCGTGGTGTTCATCCATTCTAGATGAGATTCTCATTGGGAAGATCAAAGGCTGC
AGCCAGAAAGGAGTGCACGTCTCTTAGGCTTCTCGATGACATTCTCATCCCCCAGAGTCACTGCAG
CAGCCAGCAAGTTCGACGAAGCGGAGCAGGTGTGGGTGTGGGAGTACGACGAGGAAGGAGCACAC
GACCTCTACATGGACACCGGCGAGGAGATCCGCTTCCGGGTGGTGGACGAGAGCTTTGTTGACACGTCC
CCCACAGGGCCCAGCTCAGCAGATGCCACCACTTCCAGTGAGGAGCTGCCAAAGAAGGAGGCTCCGTAC
ACGCTTGTGGGATCCATCAGTGAGCCAGGCCTGGGCCTTCTCTCTGGTGGACCAGCAAC
ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAAAC
```

**Protein Sequence:** >Peptide sequence encoded by RG236540  
Blue=ORF Red=Cloning site Green=Tag(s)

```
MFVLVEMVDTVRIPPWQFERKLNDSIAEELNKKLANKVYVNVGLCICLFDITKLEDAYVFPDGDASHTK
VHFRVVFHFPFLDEILIGKIKGCSPEGVHVS LGFFDDILIPPELQPPAKFDEAEQVWWEYETEEGAHL
DLYMDTGEEIRFRVVDSEFVDTSPGSSADATTSSEELPKKEAPYTLVGSISEPLGLLSWWTSN
TRTRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGEGTPEQGRMTNKMSTKGALTFSPYLLSHV
MGYGFYHFGTYPSPGYENPFLHAINNGYNTRIEKYEDGGV LHVFSYRYEAGRVIGDFKVMGTGFPED
SVIFTDKIIRSNATVEHLHPMGDNDLDGSFTRTFSLRDGGYSSVVD SHMHFKSAIHP SILQNGGPMFA
FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV
```

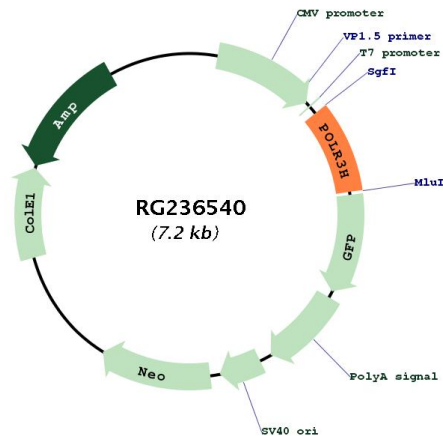
**Restriction Sites:** Sgfl-MluI



**Cloning Scheme:**



**Plasmid Map:**



**ACCN:** NM\_001282885

**ORF Size:** 612 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).

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RefSeq:	<u>NM_001282885.1, NP_001269814.1</u>
RefSeq Size:	4179 bp
RefSeq ORF:	615 bp
Locus ID:	171568
UniProt ID:	<u>Q9Y535</u>
Cytogenetics:	22q13.2
Protein Families:	Transcription Factors
Protein Pathways:	Cytosolic DNA-sensing pathway, Metabolic pathways, Purine metabolism, Pyrimidine metabolism, RNA polymerase
MW:	22.9 kDa
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. 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]