

Product datasheet for **RG210633**

POLR3H (NM_001018050) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: POLR3H (NM_001018050) 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: >RG210633 representing NM_001018050
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGTTCTGCTCGGTGGAATGGTGGACACCGTCCGGATCCCCCTTGGCAGTTTGAGAGGAAGCTCAACG
 ACTCCATTGCCGAGGAGCTGAACAAGAAGTTGGCCAACAAGGTCGTGTACAACGTGGGACTCTGCATTTG
 TCTGTTTGATATACCAAAGTGGAGGATGCCTATGTATCCCTGGGGATGGCGCATCACACCAAAGTC
 CATTTCGCTGCGTGGTGTTCATCCATTCCTAGATGAGATTCTCATTGGGAAGATCAAAGGCTGCAGCC
 CAGAAGGAGTGCACGTCTCTTAGGCTTCTCGATGACATTCTCATCCCCCAGAGTCACTGCAGCAGCC
 AGCCAAGTTCGACGAAGCGGAGCAGGTGTGGGTGTGGGAGTACGAGACGGAGGAAGGAGCACACGACCTC
 TACATGGACACCGCGAGGAGATCCGCTCCGGGTGGTGGACGAGAGCTTTGTTGACACGTCACCCACAG
 GGCCAGCTCAGCAGATGCCACCACTCCAGTGAGGAGCTGCCAAGAAGGAGGCTCCGTACACGCTTGT
 GGGATCCATCAGTGAGCCAGGCTGGGCCTTCTCTCTGGTGGACCAGCAAC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG210633 representing NM_001018050
 Red=Cloning site Green=Tags(s)

MFVLVEMVDTVRIPPWQFERKLNDSIAEELNKKLANKVVYVNVGLCICLFDITKLEDAYVFPDGDASHTKV
 HFRCVVHPFLDEILIGIKGCSPEGVHVS LGFFDDILIPPELQPAKFDEAEQVWWEYETEAGHDL
 YMDTGEEIRFRVDES FVDTSP TGPSSADATTSSEELPKKEAPYTLVGSISEPGLGLLSWWTSN

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

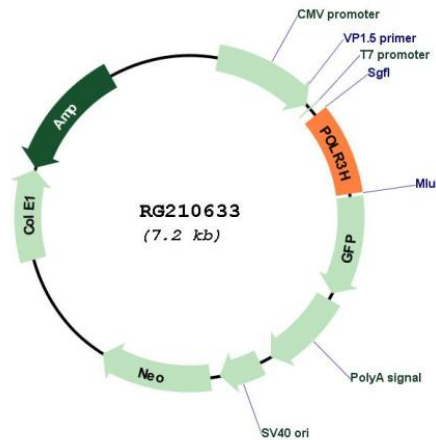


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Cloning Scheme:



Plasmid Map:



ACCN: NM_001018050

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).

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_001018050.4](#)

RefSeq Size: 4465 bp

RefSeq ORF: 615 bp

Locus ID: 171568

UniProt ID: [Q9Y535](#)

Cytogenetics: 22q13.2

Protein Families: Transcription Factors

Protein Pathways: Cytosolic DNA-sensing pathway, Metabolic pathways, Purine metabolism, Pyrimidine metabolism, RNA polymerase

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]