

## Product datasheet for **RC210633**

### **POLR3H (NM\_001018050) Human Tagged ORF Clone**

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** POLR3H (NM\_001018050) Human Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** POLR3H  
**Synonyms:** C25; RPC8; RPC22.9  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >RC210633 ORF sequence  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGTTCTGCTGGTGGAAATGGTGGACACCGTCCGGATCCCCCTTGGCAGTTTGAGAGGAAGCTCAACG  
ACTCCATTGCCGAGGAGCTGAACAAGAAGTTGGCCAACAAGGTCGTGTACAACGTGGGACTCTGCATTTG  
TCTGTTTGATATCACAACTGGAGGATGCCTATGTATCCCTGGGGATGGCGCATCACACCAAAGTC  
CATTTTCGCTGCGTGGTGTTCATCCATTCCTAGATGAGATTCTCATTGGGAAGATCAAAGGCTGCAGCC  
CAGAAGGAGTGCACGTCTCTTAGGCTTCTCGATGACATTCTCATCCCCCAGAGTCACTGCAGCAGCC  
AGCCAAGTTCGACGAAGCGGAGCAGGTGTGGGTGTGGGAGTACGAGACGGAGGAAGGAGCACACGACCTC  
TACATGGACACCGCGAGGAGATCCGCTTCCGGGTGGTGGACGAGAGCTTTGTTGACACGTCCCCACAG  
GGCCAGCTCAGCAGATGCCACCACTTCCAGTGAGGAGCTGCCAAAGAAGGAGGCTCCGTACACGCTTGT  
GGGATCCATCAGTGAGCCAGGCTGGGCCTTCTCTCTGGTGGACCAGCAAC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC210633 protein sequence  
Red=Cloning site Green=Tags(s)

MFVLVEMVDTVRIPPWQFERKLNDIAEELNKKLANKVVYVGLCICLFDITKLEDAYVFPDGDASHTKV  
HFRCVVFHPFLDEILIGIKGCSPEGVHVS LGFFDDILIPPELQQPAKFDEAEQVWWEYETEEGAHDL  
YMDTGEEIRFRVDESFDTSPTGPSSADATTSSEELPKKEAPYTLVGSISEPGLGLLSWWTSN

**TRTRPLEQKLI**SEEDLAANDILDYKDDDDKV



**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6367\\_a12.zip](https://cdn.origene.com/chromatograms/mk6367_a12.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**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.

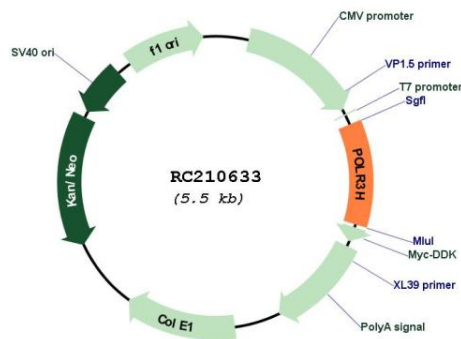
**Note:** Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

**RefSeq:** [NM\\_001018050.4](#)

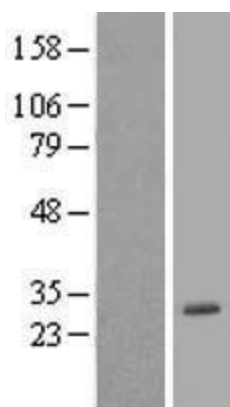
**RefSeq Size:** 4492 bp

RefSeq ORF:	615 bp
Locus ID:	171568
UniProt ID:	<a href="#">Q9Y535</a>
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]

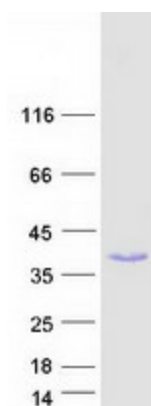
**Product images:**



Circular map for RC210633



Western blot validation of overexpression lysate (Cat# [LY408616]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with [RC220534] using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified POLR3H protein (Cat# [TP310633]). The protein was produced from HEK293T cells transfected with POLR3H cDNA clone (Cat# RC210633) using MegaTran 2.0 (Cat# [TT210002]).