

# **Product datasheet for TP300279M**

### OriGene Technologies, Inc.

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### RPC62 (POLR3C) (NM\_006468) Human Recombinant Protein

**Product data:** 

**Product Type:** Recombinant Proteins

**Description:** Recombinant protein of human polymerase (RNA) III (DNA directed) polypeptide C (62kD)

(POLR3C), 100 µg

Species: Human
Expression Host: HEK293T

**Expression cDNA Clone** >RC200279 protein sequence or AA Sequence: Red=Cloning site Green=Tags(s)

MTQAEIKLCSLLLQEHFGEIVEKIGVHLIRTGSQPLRVIAHDTGTSLDQVKKALCVLVQHNLVSYQVHKR GVVEYEAQCSRVLRMLRYPRYIYTTKTLYSDTGELIVEELLLNGKLTMSAVVKKVADRLTETMEDGKTMD YAEVSNTFVRLADTHFVQRCPSVPTTENSDPGPPPPAPTLVINEKDMYLVPKLSLIGKGKRRRSSDEDAA GEPKAKRPKYTTDNKEPIPDDGIYWQANLDRFHQHFRDQAIVSAVANRMDQTSSEIVRTMLRMSEITTSS SAPFTQPLSSNEIFRSLPVGYNISKQVLDQYLTLLADDPLEFVGKSGDSGGGMYVINLHKALASLATATL ESVVQERFGSRCARIFRLVLQKKHIEQKQVEDFAMIPAKEAKDMLYKMLSENFMSLQEIPKTPDHAPSRT FYLYTVNILSAARMLLHRCYKSIANLIERRQFETKENKRLLEKSQRVEAIIASMQATGAEEAQLQEIEEM

ITAPERQQLETLKRNVNKLDASEIQVDETIFLLESYIECTMKRQ

**TRTRPLEQKLISEEDLAANDILDYKDDDDKV** 

Tag: C-Myc/DDK
Predicted MW: 60.4 kDa

Concentration:  $>0.05 \mu g/\mu L$  as determined by microplate BCA method

**Purity:** > 80% as determined by SDS-PAGE and Coomassie blue staining

**Buffer:** 25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol

**Preparation:** Recombinant protein was captured through anti-DDK affinity column followed by

conventional chromatography steps.

**Note:** For testing in cell culture applications, please filter before use. Note that you may experience

some loss of protein during the filtration process.

Storage: Store at -80°C.



#### RPC62 (POLR3C) (NM\_006468) Human Recombinant Protein - TP300279M

Stability: Stable for 12 months from the date of receipt of the product under proper storage and

handling conditions. Avoid repeated freeze-thaw cycles.

**RefSeq:** NP 006459

 Locus ID:
 10623

 UniProt ID:
 Q9BUI4

 RefSeq Size:
 1888

 Cytogenetics:
 1q21.1

 RefSeq ORF:
 1602

Synonyms: C82; RPC3; RPC62

**Summary:** DNA-dependent RNA polymerase catalyzes the transcription of DNA into RNA using the four

ribonucleoside triphosphates as substrates. Specific core component of RNA polymerase III which synthesizes small RNAs, such as 5S rRNA and tRNAs. May direct with other members of the subcomplex RNA Pol III binding to the TFIIIB-DNA complex via the interactions between TFIIIB and POLR3F. May be involved either in the recruitment and stabilization of the subcomplex within RNA polymerase III, or in stimulating catalytic functions of other subunits

during initiation. 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. Preferentially binds single-stranded DNA (ssDNA) in a sequence-independent manner (PubMed:21358628).[UniProtKB/Swiss-Prot

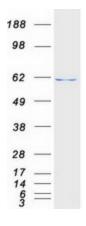
Function]

**Protein Families:** Transcription Factors

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

metabolism, RNA polymerase

# **Product images:**



Coomassie blue staining of purified POLR3C protein (Cat# [TP300279]). The protein was produced from HEK293T cells transfected with POLR3C cDNA clone (Cat# [RC200279]) using MegaTran 2.0 (Cat# [TT210002]).