

**RPC5 Antibody (Center)**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP1956c****Specification**

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**RPC5 Antibody (Center) - Product Information**

Primary Accession	<a href="#">O9NVU0</a>
Reactivity	<b>Human</b>
Host	<b>Rabbit</b>
Clonality	<b>Polyclonal</b>
Isotype	<b>Rabbit IgG</b>
Antigen Region	<b>241-271</b>

**RPC5 Antibody (Center) - Additional Information****Gene ID** 55718**Other Names**

DNA-directed RNA polymerase III subunit RPC5, RNA polymerase III subunit C5, DNA-directed RNA polymerase III 80 kDa polypeptide, POLR3E, KIAA1452

**Target/Specificity**

This RPC5 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 241~271 amino acids from the central region of human RPC5.

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

RPC5 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

**RPC5 Antibody (Center) - Protein Information****Name** POLR3E ([HGNC:30347](#))**Synonyms** KIAA1452

**Function** DNA-dependent RNA polymerase catalyzes the transcription of DNA into RNA using the four ribonucleoside triphosphates as substrates (PubMed:[20413673](#), PubMed:[12391170](#), PubMed:[35637192](#)). Specific peripheric component of RNA polymerase III (Pol III) which synthesizes small non-coding RNAs including 5S rRNA, snRNAs, tRNAs and miRNAs from at least 500 distinct genomic loci. Assembles with POLR3D/RPC4 forming a subcomplex that binds the Pol

III core. Enables recruitment of Pol III at transcription initiation site and drives transcription initiation from both type 2 and type 3 DNA promoters. Required for efficient transcription termination and reinitiation (PubMed:[20413673](#), PubMed:[12391170](#), PubMed:[35637192](#)) (By similarity). Plays a key role in sensing and limiting infection by intracellular bacteria and DNA viruses. Acts as a 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 (PubMed:[19609254](#), PubMed:[19631370](#)).

**Cellular Location**

Nucleus.

**RPC5 Antibody (Center) - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**RPC5 Antibody (Center) - Images****RPC5 Antibody (Center) - Background**

RNA polymerase III synthesizes RNA components of the protein synthesis, pre-mRNA splicing, and tRNA processing apparatuses. The holoenzyme consists of about 15 different subunits. The RPC5 subunit is essential for efficient transcription from both the type 2 VAI and type 3 U6 RNA polymerase III promoters.

**RPC5 Antibody (Center) - References**

Hu, P., et al., Mol. Cell. Biol. 22(22):8044-8055 (2002).  
Jang, K.L., et al., J. Acquir. Immune Defic. Syndr. 5(11):1142-1147 (1992).

**RPC5 Antibody (Center) - Citations**

- [FACT facilitates chromatin transcription by RNA polymerases I and III.](#)