

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

RPC5 Antibody (Center) - Product Information

| | |
|-------------------|------------------------|
| Application | ,E |
| Primary Accession | Q9NVU0 |
| Reactivity | Human |
| Host | Rabbit |
| Clonality | Polyclonal |
| Isotype | Rabbit IgG |
| Antigen Region | 241-271 |

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.

Dilution

E~~Use at an assay dependent concentration.

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:[12391170](#), PubMed:[20413673](#), 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 (By similarity) (PubMed:[12391170](#), PubMed:[20413673](#), PubMed:[35637192](#)). 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.](#)