

POLR3D Antibody (Center) Blocking peptide
Synthetic peptide
Catalog # BP13498c**Specification**

POLR3D Antibody (Center) Blocking peptide - Product InformationPrimary Accession [P05423](#)**POLR3D Antibody (Center) Blocking peptide - Additional Information****Gene ID** 661**Other Names**

DNA-directed RNA polymerase III subunit RPC4, RNA polymerase III subunit C4, DNA-directed RNA polymerase III subunit D, Protein BN51, RNA polymerase III 47 kDa subunit, RPC53 homolog, POLR3D, BN51, BN51T

Target/Specificity

The synthetic peptide sequence used to generate the antibody AP13498c was selected from the Center region of POLR3D. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

POLR3D Antibody (Center) Blocking peptide - Protein Information**Name** POLR3D ([HGNC:1080](#))**Synonyms** BN51, BN51T**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, PubMed:34675218, PubMed:33558764). 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 POLR3E/RPC5 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). Pol III 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 (PubMed:19609254, PubMed:19631370).

Cellular Location

Nucleus.

POLR3D Antibody (Center) Blocking peptide - Protocols

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

- [Blocking Peptides](#)

POLR3D Antibody (Center) Blocking peptide - Images

POLR3D Antibody (Center) Blocking peptide - Background

This gene complements a temperature-sensitive mutant isolated from the BHK-21 Syrian hamster cell line. It leads to a block in progression through the G1 phase of the cell cycle at nonpermissive temperatures.

POLR3D Antibody (Center) Blocking peptide - References

Chiu, Y.H., et al. Cell 138(3):576-591(2009) Lamesch, P., et al. Genomics 89(3):307-315(2007) Olsen, J.V., et al. Cell 127(3):635-648(2006) Olsen, J.V., et al. Cell 127(3):635-648(2006) Hu, P., et al. Mol. Cell. Biol. 22(22):8044-8055(2002)