10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

POLR3D Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP13498c

Specification

POLR3D Antibody (Center) - Product Information

Application	**WB,E**
Primary Accession	P05423
Other Accession	Q91WD1, Q5E9Z7, NP_001713.2
Reactivity	**Human**
Predicted	**Bovine, Mouse**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**44396**
Antigen Region	**127-156**

POLR3D Antibody (Center) - 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
This POLR3D antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 127-156 amino acids from the Central region of human POLR3D.

Dilution
WB~~1:1000
E~~Use at an assay dependent concentration.

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

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
POLR3D Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

POLR3D Antibody (Center) - Protein Information

10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

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:12391170, PubMed:20413673, PubMed:33558764, PubMed:34675218, 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 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 (By similarity) (PubMed:12391170, PubMed:20413673, PubMed:35637192). 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).

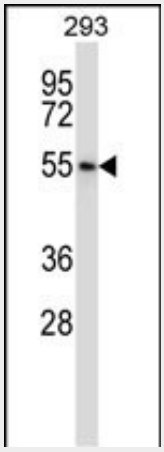
Cellular Location
Nucleus.

POLR3D Antibody (Center) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

POLR3D Antibody (Center) - Images



POLR3D Antibody (Center) (Cat. #AP13498c) western blot analysis in 293 cell line lysates (35ug/lane).This demonstrates the POLR3D antibody detected the POLR3D protein (arrow).

10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

POLR3D Antibody (Center) - 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) - 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)