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POLR3D Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP13498c

Product Information

Application	WB, E
Primary Accession	P05423
Other Accession	Q91WD1, Q5E9Z7, NP_001713.2
Reactivity	Human
Predicted	Bovine, Mouse, Rat, Canine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB33419
Calculated MW	44396
Antigen Region	127-156

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.

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: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.

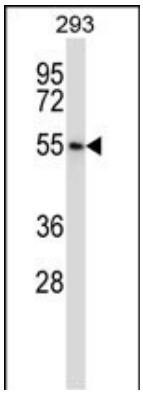
Background

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.

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)
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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).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.