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POLR3C Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP17225c

Specification

POLR3C Antibody (Center) - Product Information

Application	**WB,E**
Primary Accession	Q9BUI4
Other Accession	NP_006459.3
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**60612**
Antigen Region	**202-230**

POLR3C Antibody (Center) - Additional Information

Gene ID 10623

Other Names
DNA-directed RNA polymerase III subunit RPC3, RNA polymerase III subunit C3, DNA-directed RNA polymerase III subunit C, RNA polymerase III 62 kDa subunit, RPC62, POLR3C

Target/Specificity
This POLR3C antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 202-230 amino acids from the Central region of human POLR3C.

Dilution
WB~~1:1000

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
POLR3C Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

POLR3C Antibody (Center) - Protein Information

Name POLR3C (HGNC:30076)

Function DNA-dependent RNA polymerase catalyzes the transcription of DNA into RNA using the

four ribonucleoside triphosphates as substrates (PubMed:20413673, PubMed:35637192, PubMed:34675218, PubMed:33558764, PubMed:33558766). 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 (PubMed:20413673, PubMed:35637192, PubMed:33558764, PubMed:33558766). Part of POLR3C/RPC3-POLR3F/RPC6-POLR3G/RPC7 heterotrimer, coordinates the dynamics of Pol III stalk and clamp modules during the transition from apo to elongation state (PubMed:33558764, PubMed:33558766). Pol III 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). Preferentially binds single-stranded DNA (ssDNA) in a sequence-independent manner (PubMed:21358628).

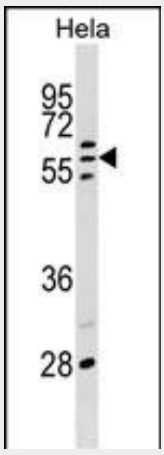
Cellular Location
Nucleus.

POLR3C Antibody (Center) - Protocols

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

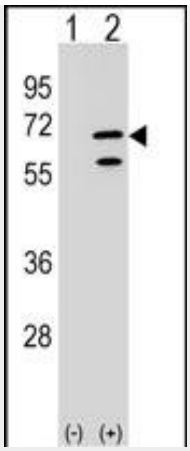
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

POLR3C Antibody (Center) - Images



POLR3C Antibody (Center) (Cat. #AP17225c) western blot analysis in Hela cell line lysates (35ug/lane).This demonstrates the POLR3C antibody detected the POLR3C protein (arrow).

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Western blot analysis of POLR3C (arrow) using rabbit polyclonal POLR3C Antibody (Center) (Cat. #AP17225c). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected (Lane 2) with the POLR3C gene.

POLR3C Antibody (Center) - Background

DNA-dependent RNA polymerase catalyzes the transcription of DNA into RNA using the four ribonucleoside triphosphates as substrates. Specific core component of RNA polymerase III which synthesizes small RNAs, such as 5S rRNA and tRNAs. May direct with other members of the subcomplex RNA Pol III binding to the TFIIIB-DNA complex via the interactions between TFIIIB and POLR3F. May be involved either in the recruitment and stabilization of the subcomplex within RNA polymerase III, or in stimulating catalytic functions of other subunits during initiation. 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.

POLR3C Antibody (Center) - References

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Hsieh, Y.J., et al. Mol. Cell. Biol. 19(11):7697-7704(1999)
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