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POLR3F Antibody (N-Terminus)
Rabbit Polyclonal Antibody
Catalog # ALS13730

Specification

POLR3F Antibody (N-Terminus) - Product Information

Application	**IF, WB, IHC**
Primary Accession	Q9H1D9
Reactivity	**Human, Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**36kDa KDa**

POLR3F Antibody (N-Terminus) - Additional Information

Gene ID 10621

Other Names
DNA-directed RNA polymerase III subunit RPC6, RNA polymerase III subunit C6, DNA-directed RNA polymerase III subunit F, RNA polymerase III 39 kDa subunit, RPC39, POLR3F

Reconstitution & Storage
Short term 4°C, long term aliquot and store at -20°C, avoid freeze thaw cycles. Store undiluted.

Precautions
POLR3F Antibody (N-Terminus) is for research use only and not for use in diagnostic or therapeutic procedures.

POLR3F Antibody (N-Terminus) - Protein Information

Name POLR3F (HGNC:15763)

Function
DNA-dependent RNA polymerase catalyzes the transcription of DNA into RNA using the four ribonucleoside triphosphates as substrates (PubMed:20413673, PubMed:21358628, 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. Part of POLR3C/RPC3- POLR3F/RPC6-POLR3G/RPC7 heterotrimer that coordinates the dynamics of Pol III stalk and clamp modules during the transition from apo to elongation state (PubMed:20413673, PubMed:33558764, PubMed:33558766). Pol III plays a key role in sensing and limiting infection by intracellular bacteria and DNA viruses, including varicella zoster virus. Acts as a nuclear and cytosolic DNA sensor detecting AT-rich DNA, 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:19631370, PubMed:19609254, PubMed:30211253). Preferentially binds double-stranded DNA (dsDNA) (PubMed:21358628).

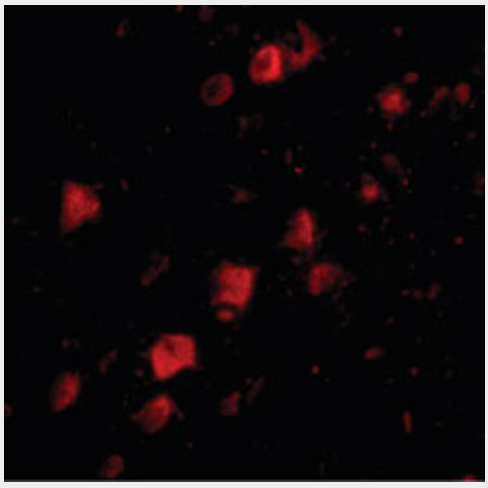
Cellular Location
Nucleus.

POLR3F Antibody (N-Terminus) - Protocols

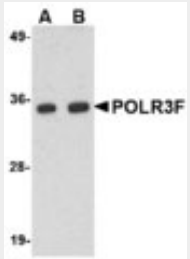
Provided below are standard protocols that you may find useful for product applications.

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

POLR3F Antibody (N-Terminus) - Images



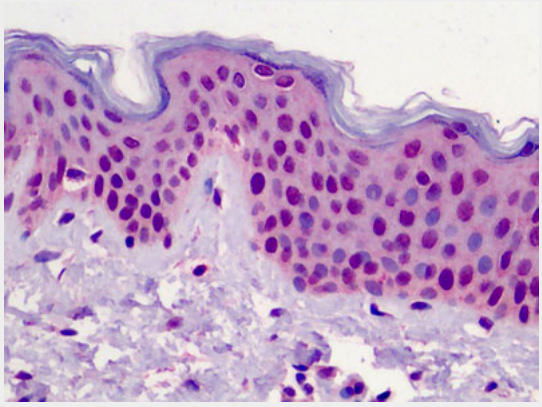
Immunofluorescence of POLR3F in human brain tissue with POLR3F antibody at 20 ug/ml.



Western blot of POLR3F in human brain tissue lysate with POLR3F antibody at (A) 0.5 and (B) 1

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ug/ml.



Anti-POLR3F antibody IHC of human skin.

POLR3F Antibody (N-Terminus) - Background

DNA-dependent RNA polymerase catalyzes the transcription of DNA into RNA using the four ribonucleoside triphosphates as substrates. Specific peripheric component of RNA polymerase III which synthesizes small RNAs, such as 5S rRNA and tRNAs. May direct RNA Pol III binding to the TFIIIB-DNA complex. 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.

POLR3F Antibody (N-Terminus) - References

Wang Z.,et al.Genes Dev. 11:1315-1326(1997).
Ota T.,et al.Nat. Genet. 36:40-45(2004).
Deloukas P.,et al.Nature 414:865-871(2001).
Mural R.J.,et al.Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases.
Hsieh Y.-J.,et al.Mol. Cell. Biol. 19:7697-7704(1999).