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Anti-POLR3F Antibody

Catalog # AP51764

Product Information

Application	WB
Primary Accession	Q9H1D9
Reactivity	Human, Mouse, Rat, Mk
Host	Rabbit
Clonality	Polyclonal
Calculated MW	35684

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
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human POLR3F. The exact sequence is proprietary.
Dilution	WB~~ 1:1000
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

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:33558764, PubMed:34675218). 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

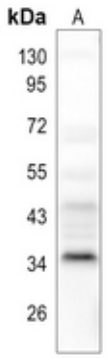
virus-encoded RNAs (EBERs) induce type I interferon and NF-kappa-B through the RIG-I pathway (PubMed:19609254, PubMed:19631370, PubMed:30211253). Preferentially binds double-stranded DNA (dsDNA) (PubMed:21358628).

Cellular Location Nucleus.

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).

Images



Western blot analysis of POLR3F expression in HeLa (A) whole cell lysates. (Predicted band size: 35 kD; Observed band size: 35 kD)

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