

Pol III RPC32 (H-136): sc-28712

BACKGROUND

Eukaryotes produce three distinct classes of RNA polymerase, Pol I, II and III. Each polymerase is responsible for the synthesis of a different class of RNA. RNA polymerase I (Pol I) transcribes the rRNA (ribosomal RNA) genes for the precursor of the 28S, 18S and 5.8S molecules of the ribosome. RNA polymerase II (Pol II) transcribes protein-encoding genes into mRNA (messenger RNA) and snRNA (small nuclear RNA) genes into snRNAs that influence the processing of other classes of RNA. RNA polymerase III (Pol III) transcribes the 5S rRNA genes and all of the tRNA (transfer RNA) genes.

REFERENCES

1. Bushnell, D.A., et al. 2004. Structural basis of transcription: an RNA polymerase II-TFIIB cocrystal at 4.5 angstroms. *Science* 303: 983-988.
2. Palangat, M., et al. 2004. Downstream DNA selectively affects a paused conformation of human RNA polymerase II. *J. Mol. Biol.* 341: 429-442.

CHROMOSOMAL LOCATION

Genetic locus: POLR3G (human) mapping to 5q14.3; Polr3g (mouse) mapping to 13 C3.

SOURCE

Pol III RPC32 (H-136) is a rabbit polyclonal antibody raised against amino acids 1-136 mapping at the N-terminus of Pol III RPC32 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

Pol III RPC32 (H-136) is recommended for detection of RPC 32 subunit of RNA polymerase III of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Pol III RPC32 (H-136) is also recommended for detection of RPC 32 subunit of RNA polymerase III in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Pol III RPC32 siRNA (h): sc-43507, Pol III RPC32 siRNA (m): sc-45840, Pol III RPC32 shRNA Plasmid (h): sc-43507-SH, Pol III RPC32 shRNA Plasmid (m): sc-45840-SH, Pol III RPC32 shRNA (h) Lentiviral Particles: sc-43507-V and Pol III RPC32 shRNA (m) Lentiviral Particles: sc-45840-V.

Molecular Weight (predicted) of Pol III RPC32: 26 kDa.

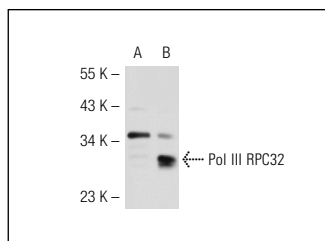
Molecular Weight (observed) of Pol III RPC32: 32 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, A-431 whole cell lysate: sc-2201 or Pol III RPC32 (m): 293T Lysate: sc-122682.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



Pol III RPC32 (FL-233): sc-28712. Western blot analysis of Pol III RPC32 expression in non-transfected: sc-117752 (A) and mouse Pol III RPC32 transfected: sc-122682 (B) 293T whole cell lysates.

SELECT PRODUCT CITATIONS

1. Veronese, A., et al. 2014. Allele-specific loss and transcription of the miR-15a/16-1 cluster in chronic lymphocytic leukemia. *Leukemia*. E-published.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.


 MONOS
Satisfaction
Guaranteed

Try **Pol III RPC32 (H-9): sc-48365** or **Pol III RPC32 (C32-1): sc-21754**, our highly recommended monoclonal alternatives to Pol III RPC32 (H-136).