

Pol III RPC39 (E-19): sc-32126

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: POLR3F (human) mapping to 20p11.23; Polr3f (mouse) mapping to 2 G1.

SOURCE

Pol III RPC39 (E-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of Pol III RPC39 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.

Blocking peptide available for competition studies, sc-32125 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Pol III RPC39 (E-19) is recommended for detection of the RPC 39 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 RPC39 (E-19) is also recommended for detection of Pol III RPC39 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for Pol III RPC39 siRNA (h): sc-36292, Pol III RPC39 siRNA (m): sc-45839, Pol III RPC39 shRNA Plasmid (h): sc-36292-SH, Pol III RPC39 shRNA Plasmid (m): sc-45839-SH, Pol III RPC39 shRNA (h) Lentiviral Particles: sc-36292-V and Pol III RPC39 shRNA (m) Lentiviral Particles: sc-45839-V.

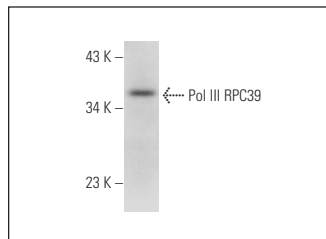
Molecular Weight of Pol III RPC39: 39 kDa.

Positive Controls: HeLa nuclear extract: sc-2120, A-431 nuclear extract: sc-2122 or HeLa whole cell lysate: sc-2200.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



Pol III RPC39 (E-19): sc-32126. Western blot analysis of Pol III RPC39 expression in BxPC-3 whole cell lysate.

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.



Try **Pol III RPC39 (C39-2): sc-23913** or **Pol III RPC39 (C39-1): sc-21753**, our highly recommended monoclonal alternatives to Pol III RPC39 (E-19).