

# POLR3H (N-14): sc-86798

## 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 III (Pol III) transcribes the 5S rRNA genes and all of the tRNA (transfer RNA) genes. POLR3H (DNA-directed RNA polymerase III subunit H), also known as DNA-directed RNA polymerase III subunit RPC8, is a 204 amino acid nuclear protein that is one of the 17 subunits that comprise Pol III. Using the four ribonucleoside triphosphates as substrates, POLR3H catalyzes the transcription of DNA into RNA. A possible Pol III subcomplex is formed via the interaction between POLR3H and CGRP-RCP. There are two isoforms of POLR3H that are produced as a result of alternative splicing events.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: POLR3H (human) mapping to 22q13.2; Polr3h (mouse) mapping to 15 E1.

## RESEARCH USE

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

## SOURCE

POLR3H (N-14) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping near the N-terminus of POLR3H of human origin.

## PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-86798 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

POLR3H (N-14) is recommended for detection of POLR3H of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

POLR3H (N-14) is also recommended for detection of POLR3H in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for POLR3H siRNA (h): sc-76194, POLR3H siRNA (m): sc-152381, POLR3H shRNA Plasmid (h): sc-76194-SH, POLR3H shRNA Plasmid (m): sc-152381-SH, POLR3H shRNA (h) Lentiviral Particles: sc-76194-V and POLR3H shRNA (m) Lentiviral Particles: sc-152381-V.

Molecular Weight of POLR3H: 23 kDa.

## 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) 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.

## STORAGE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.