

# POLR2G (S-12): sc-131333

## BACKGROUND

RNA polymerase II (Pol II) is a multi-subunit enzyme responsible for the transcription of protein-coding genes. Transcription initiation requires recruitment of the complete transcription machinery to a promoter via solicitation by activators and chromatin remodeling factors. Pol II can coordinate 10 to 14 subunits. This complex interacts with the promoter regions of genes and a variety of elements and transcription factors. POLR2G (DNA-directed RNA polymerase II subunit G), also known as RPB7, hRPB19 or hsRPB7, is the seventh largest subunit of RNA polymerase II. It is required for the transcription initiation phase of Pol II. POLR2G forms a subcomplex with the RPB4 subunit. This subcomplex protrudes from the Pol II core complex and, in the closed conformation, functions to prevent double stranded DNA from entering the active site.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: POLR2G (human) mapping to 11q12.3; Polr2g (mouse) mapping to 19 A.

## SOURCE

POLR2G (S-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of POLR2G of human origin.

## RESEARCH USE

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

## 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-131333 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

POLR2G (S-12) is recommended for detection of POLR2G 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); non cross-reactive with other POLR family members.

Suitable for use as control antibody for POLR2G siRNA (h): sc-96905, POLR2G siRNA (m): sc-77405, POLR2G shRNA Plasmid (h): sc-96905-SH, POLR2G shRNA Plasmid (m): sc-77405-SH, POLR2G shRNA (h) Lentiviral Particles: sc-96905-V and POLR2G shRNA (m) Lentiviral Particles: sc-77405-V.

Molecular Weight of POLR2G: 19 kDa.

Positive Controls: NIH/3T3 whole cell lysate: sc-2210, HT-1080 whole cell lysate or F2408 whole cell lysate.

## 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) 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.

## 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.


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Try **POLR2G (C-2): sc-398213** or **POLR2G (G-9): sc-393890**, our highly recommended monoclonal alternatives to POLR2G (S-12).