POLR2B (H-201): sc-67318



The Power to Question

BACKGROUND

RNA polymerase II (Pol II) is a multi-subunit complex responsible for catalyzing the transcription of DNA into RNA. POLR2B (polymerase (RNA) II (DNA directed) polypeptide B), also known as RPB2 (RNA polymerase II subunit B2), is a 1,174 amino acid protein that is the second largest subunit in the Pol II complex. POLR2B, along with the other Pol II subunits, uses the 4 ribonucle-oside triphosphates as substrates to catalyze the transcription of DNA to RNA. Localized to the nucleus, POLR2B is one of at least three subunits that form a structure which is essential in maintaining contact between the active site of Pol II and the DNA template/newly synthesized RNA. In addition to POLR2B, this complex contains the central large cleft, a clamp element that opens and closes the cleft and functions to grab the incoming DNA template.

CHROMOSOMAL LOCATION

Genetic locus: POLR2B (human) mapping to 4q12; Polr2b (mouse) mapping to 5 C3.3.

SOURCE

POLR2B (H-201) is a rabbit polyclonal antibody raised against amino acids 184-384 mapping near the N-terminus of POLR2B of human origin.

PRODUCT

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

STORAGE

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

APPLICATIONS

POLR2B (H-201) is recommended for detection of POLR2B of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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).

POLR2B (H-201) is also recommended for detection of POLR2B in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for POLR2B siRNA (h): sc-62962, POLR2B siRNA (m): sc-62963, POLR2B shRNA Plasmid (h): sc-62962-SH, POLR2B shRNA Plasmid (m): sc-62963-SH, POLR2B shRNA (h) Lentiviral Particles: sc-62962-V and POLR2B shRNA (m) Lentiviral Particles: sc-62963-V.

POLR2B (H-201) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

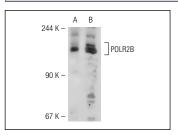
Molecular Weight of POLR2B: 134 kDa.

Positive Controls: Ramos nuclear extract: sc-2153, 3611-RF nuclear extract: sc-2143 or IMR-32 nuclear extract: sc-2148.

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



POLR2B (H-201): sc-67318. Western blot analysis of POLR2B expression in 293T whole cell lysate (**A**) and Ramos nuclear extract (**B**).

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 **POLR2B (E-12):** sc-166803, our highly recommended monoclonal aternative to POLR2B (H-201).

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