

POLR3B (N-15): sc-109401

BACKGROUND

RNA polymerase II (Pol II) is a multi-subunit complex responsible for catalyzing the transcription of DNA into RNA. POLR3B (polymerase (RNA) III (DNA directed) polypeptide B), also known as C128 or RPC2, is a 1,133 amino acid protein that localizes to the nucleus and belongs to the RNA polymerase β chain family. Existing as the second largest component of the multi-protein RNA polymerase III (Pol III) complex, POLR3B functions as a DNA-dependent RNA polymerase that specifically catalyzes the transcription of DNA into RNA using ribonucleoside triphosphates as substrates. The gene encoding POLR3B maps to human chromosome 12, which encodes over 1,100 genes and comprises approximately 4.5% of the human genome. Chromosome 12 is associated with a variety of diseases and afflictions, including hypochondrogenesis, achondrogenesis, Kniest dysplasia, Noonan syndrome and Trisomy 12p, which causes facial developmental defects and seizure disorders.

CHROMOSOMAL LOCATION

Genetic locus: POLR3B (human) mapping to 12q23.3; Polr3b (mouse) mapping to 10 C1.

SOURCE

POLR3B (N-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of POLR3B of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-109401 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

POLR3B (N-15) is recommended for detection of POLR3B 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).

POLR3B (N-15) is also recommended for detection of POLR3B in additional species, including equine, canine, bovine and avian.

Suitable for use as control antibody for POLR3B siRNA (h): sc-95786, POLR3B siRNA (m): sc-152377, POLR3B shRNA Plasmid (h): sc-95786-SH, POLR3B shRNA Plasmid (m): sc-152377-SH, POLR3B shRNA (h) Lentiviral Particles: sc-95786-V and POLR3B shRNA (m) Lentiviral Particles: sc-152377-V.

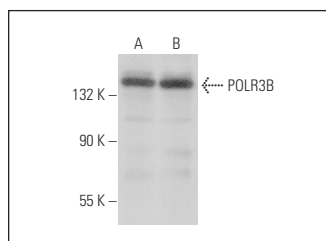
Molecular Weight of POLR3B: 128 kDa.

Positive Controls: HEK293 whole cell lysate: sc-45136 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



POLR3B (N-15): sc-109401. Western blot analysis of POLR3B expression in HEK293 (A) and HeLa (B) whole cell lysates.

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 **POLR3B (G-6): sc-515362**, our highly recommended monoclonal alternative to POLR3B (N-15).