

RPAP2 (P-18): sc-139548

BACKGROUND

RNA polymerases transcribe nuclear genes for ribosomal RNA and are integral components of ribosomal biogenesis. RNA polymerase I (Pol I) is located in the nucleolus and transcribes class I genes, which code for large ribosomal RNA. RNA polymerase II (Pol II) synthesizes mRNA. RPAP2 (RNA polymerase II associated protein 2) is a 612 amino acid protein that is essential for connecting Pol II to regulators of protein complex formation. A single pass-membrane protein, RPAP2 also localizes to the nucleus and is a member of the RPAP2 family. RPAP2 contains one RTR1-type zinc finger and exists as two alternatively spiced isoforms. The gene encoding RPAP2 maps to human chromosome 1p22.1, which spans 260 million base pairs, contains over 3,000 genes, comprises nearly 8% of the human genome and houses a large number of disease-associated genes, including those that are involved in familial adenomatous polyposis, Stickler syndrome, Parkinson's disease, Gaucher disease, schizophrenia and Usher syndrome.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: *Rpap2* (mouse) mapping to 5 E5.

SOURCE

RPAP2 (P-18) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping at the N-terminus of RPAP2 of mouse origin.

RESEARCH USE

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

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-139548 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

RPAP2 (P-18) is recommended for detection of RPAP2 of mouse and rat origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunofluorescence (starting dilution 1:25, dilution range 1:25-1:250) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with RPAP1 or RPAP3.

Suitable for use as control antibody for RPAP2 siRNA (m): sc-153098, RPAP2 shRNA Plasmid (m): sc-153098-SH and RPAP2 shRNA (m) Lentiviral Particles: sc-153098-V.

Molecular Weight of RPAP2 isoforms: 70/67 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 or our catalog for detailed protocols and support products.