

RPAP2 (F-16): sc-139547

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 (human) mapping to 1p22.1; Rpap2 (mouse) mapping to 5 E5.

SOURCE

RPAP2 (F-16) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of RPAP2 of human origin.

STORAGE

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

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-139547 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

RPAP2 (F-16) is recommended for detection of RPAP2 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], 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.

RPAP2 (F-16) is also recommended for detection of RPAP2 in additional species, including equine, bovine and porcine.

Suitable for use as control antibody for RPAP2 siRNA (h): sc-78826, RPAP2 siRNA (m): sc-153098, RPAP2 shRNA Plasmid (h): sc-78826-SH, RPAP2 shRNA Plasmid (m): sc-153098-SH, RPAP2 shRNA (h) Lentiviral Particles: sc-78826-V and RPAP2 shRNA (m) Lentiviral Particles: sc-153098-V.

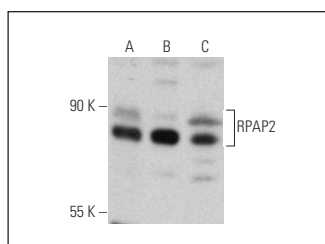
Molecular Weight of RPAP2 isoforms: 70/67 kDa.

Positive Controls: MOLT-4 cell lysate: sc-2233, K-562 whole cell lysate: sc-2203 or U-698-M whole cell lysate: sc-364799.

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



RPAP2 (F-16): sc-139547. Western blot analysis of RPAP2 expression in MOLT-4 (A), K-562 (B) and U-698-M (C) whole cell lysates.

RESEARCH USE

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