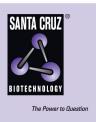
SANTA CRUZ BIOTECHNOLOGY, INC.

POLR3A (H-130): sc-292119



BACKGROUND

RNA polymerase III (Pol III) is a multi-subunit complex responsible for catalyzing the transcription of DNA into RNA. POLR3A (polymerase (RNA) III (DNA directed) polypeptide A), also known as RPC1 or RPC155, is a 1,390 amino acid protein that localizes to the nucleus and belongs to the RNA polymerase β chain family. Existing as the largest and catalytic core component of Pol III, POLR3A functions as a DNA-dependent RNA polymerase that catalyzes the conversion of a nucleoside triphosphate into a diphosphate, thereby transcribing DNA into RNA. The gene encoding POLR3A maps to human chromosome 10, which houses over 1,200 genes and comprises nearly 4.5% of the human genome. Defects in some of the genes that map to chromosome 10 are associated with Charcot-Marie Tooth disease, Jackson-Weiss syndrome, Usher syndrome, nonsyndromatic deafness, Wolman's syndrome, Cowden syndrome, multiple endocrine neoplasia type 2 and porphyria.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: POLR3A (human) mapping to 10q22.3; Polr3a (mouse) mapping to 14 A3.

SOURCE

POLR3A (H-130) is a rabbit polyclonal antibody raised against amino acids 1261-1390 mapping at the C-terminus of POLR3A of human origin.

RESEARCH USE

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

PRODUCT

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

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-292119 X, 200 $\mu g/0.1$ ml.

APPLICATIONS

POLR3A (H-130) is recommended for detection of POLR3A of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg 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).

POLR3A (H-130) is also recommended for detection of POLR3A in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for POLR3A siRNA (h): sc-90684, POLR3A siRNA (m): sc-152376, POLR3A shRNA Plasmid (h): sc-90684-SH, POLR3A shRNA Plasmid (m): sc-152376-SH, POLR3A shRNA (h) Lentiviral Particles: sc-90684-V and POLR3A shRNA (m) Lentiviral Particles: sc-152376-V.

POLR3A (H-130) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of POLR3A: 156 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) 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.

STORAGE

Store at 4° C, **D0 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.