POLR2J1/2/3 (I-13): sc-109855



The Power to Question

BACKGROUND

RNA polymerase II (Pol II) is a multi-subunit enzyme responsible for the transcription of protein-coding genes. Transcription initiation requires recruitment of the complete transcription machinery to a promoter via solicitation by activators and chromatin remodeling factors. Pol II can coordinate 10 to 14 subunits. This complex interacts with the promoter regions of genes and a variety of elements and transcription factors. POLR2J (DNA-directed RNA polymerase II subunit J) exist as three variants POLR2J1 (RPB11-a), POLR2J2 (RPB11-b1) and POLR2J3 (RPB11-b2), of nuclear protein belonging to the eukaryotic RPB11 RNA polymerase subunit family. POLR2J1/2/3 are DNA-dependent RNA polymerases that catalyze the transcription of DNA into RNA using the four ribonucleoside triphosphates as substrates. They are also part of the core element with the central large cleft.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: POLR2J/POLR2J2/POLR2J3 (human) mapping to 7q22.1; Polr2j (mouse) mapping to 5 G1.

SOURCE

POLR2J1/2/3 (I-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of POLR2J1 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 200 μg lgG in 1.0 ml of PBS with <0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-109855 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-109855 X, 200 μ g/0.1 ml.

APPLICATIONS

POLR2J1/2/3 (I-13) is recommended for detection of POLR2J1 of mouse, rat, and human origin, and POLR2J2 and POLR2J3 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

POLR2J1/2/3 (I-13) is also recommended for detection of POLR2J1, POLR2J2 and POLR2J3 in additional species, including avian.

POLR2J1/2/3 (I-13) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of POLR2J1/2/3: 13 kDa.

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) 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.

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 **POLR2J1/2/3 (G-2):** sc-514129, our highly recommended monoclonal alternative to POLR2J1/2/3 (I-13).

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