## SANTA CRUZ BIOTECHNOLOGY, INC.

# POLR2E (T-13): sc-131331



### BACKGROUND

RNA polymerase II (Pol II) is a multi-subunit complex responsible for catalyzing the transcription of DNA into RNA. POLR2E (polymerase (RNA) II (DNA directed) polypeptide E), also designated RPB5, XAP4, RPABC1, hRPB25 or hsRPB5, is a 210 amino acid nuclear protein belonging to the archaeal rpoH/eukaryotic RPB5 RNA polymerase subunit family. POLR2E is a DNA-dependent RNA polymerase that catalyzes the transcription of DNA into RNA using the four ribonucleoside triphosphates as substrates. POLR2E is a component of the RNA polymerase I (Pol I), RNA polymerase II (Pol II) and RNA polymerase III (Pol III) complexes. The Pol complexes synthesize both mRNA and ribosomal RNA precursors, many functional non-coding RNAs and small RNAs including 5S rRNA and tRNAs. POLR2E interacts with TFIIF RAP 30 and is important for the association between Pol II and TFIIF.

#### REFERENCES

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- Zaros, C., et al. 2007. Functional organization of the RPB5 subunit shared by the three yeast RNA polymerases. Nucleic Acids Res. 35: 634-647.
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#### CHROMOSOMAL LOCATION

Genetic locus: POLR2E (human) mapping to 19p13.3; Polr2e (mouse) mapping to 10 C1.

#### **RESEARCH USE**

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

### SOURCE

POLR2E (T-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of POLR2E of human origin.

#### PRODUCT

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-131331 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

#### **APPLICATIONS**

POLR2E (T-13) is recommended for detection of POLR2E of mouse, rat and 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); non cross-reactive with other POLR family members.

Suitable for use as control antibody for POLR2E siRNA (h): sc-97922, POLR2E siRNA (m): sc-152372, POLR2E shRNA Plasmid (h): sc-97922-SH, POLR2E shRNA Plasmid (m): sc-152372-SH, POLR2E shRNA (h) Lentiviral Particles: sc-97922-V and POLR2E shRNA (m) Lentiviral Particles: sc-152372-V.

Molecular Weight of POLR2E: 24 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) Immunofluo-rescence: use donkey anti-goat IgG-TR: sc-2783 (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.

#### MONOS Satisfation Guaranteed

Try **POLR2E (B-5): sc-390979** or **POLR2E (C-10): sc-390902**, our highly recommended monoclonal alternatives to POLR2E (T-13).