

Pol II RPB6 (E-8): sc-271309

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. The DNA binding domain of the polymerase is a groove where TFIIB orients the DNA for unwinding and transcription.

CHROMOSOMAL LOCATION

Genetic locus: POLR2F (human) mapping to 22q13.1; Polr2f (mouse) mapping to 15 E1.

SOURCE

Pol II RPB6 (E-8) is a mouse monoclonal antibody raised against amino acids 1-127 representing full length Pol II RPB6 of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Pol II RPB6 (E-8) is available conjugated to agarose (sc-271309 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-271309 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-271309 PE), fluorescein (sc-271309 FITC), Alexa Fluor® 488 (sc-271309 AF488), Alexa Fluor® 546 (sc-271309 AF546), Alexa Fluor® 594 (sc-271309 AF594) or Alexa Fluor® 647 (sc-271309 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-271309 AF680) or Alexa Fluor® 790 (sc-271309 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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RESEARCH USE

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

APPLICATIONS

Pol II RPB6 (E-8) is recommended for detection of Pol II RPB6 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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).

Suitable for use as control antibody for Pol I/II/III RPB6 siRNA (h): sc-45868, Pol I/II/III RPB8 siRNA (m): sc-45867, Pol I/II/III RPB6 shRNA Plasmid (h): sc-45868-SH, Pol I/II/III RPB8 shRNA Plasmid (m): sc-45867-SH, Pol I/II/III RPB6 shRNA (h) Lentiviral Particles: sc-45868-V and Pol I/II/III RPB8 shRNA (m) Lentiviral Particles: sc-45867-V.

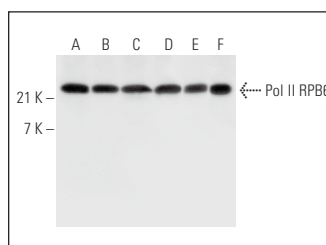
Molecular Weight of Pol II RPB6: 15 kDa.

Positive Controls: HeLa nuclear extract: sc-2120, HEK293 whole cell lysate: sc-45136 or RT-4 whole cell lysate: sc-364257.

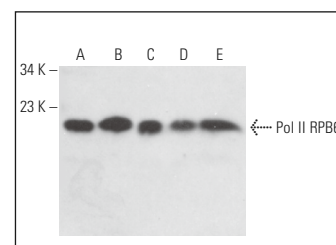
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



Pol II RPB6 (E-8): sc-271309. Western blot analysis of Pol II RPB6 expression in HeLa (A), HEK293 (B), RT-4 (C), A-431 (D) and PC-12 (E) whole cell lysates and HeLa nuclear extract (F).



Pol II RPB6 (E-8): sc-271309. Western blot analysis of Pol II RPB6 expression in HeLa (A), A-375 (B), c4 (C), NTERA-2 cl.D1 (D) and HL-60 (E) whole cell lysates.

SELECT PRODUCT CITATIONS

- Sun, X., et al. 2019. Vasoactive intestinal peptide stabilizes intestinal immune homeostasis through maintaining interleukin-10 expression in regulatory B cells. *Theranostics* 9: 2800-2811.
- Luo, H., et al. 2024. ARMC5 controls the degradation of most Pol II subunits, and ARMC5 mutation increases neural tube defect risks in mice and humans. *Genome Biol.* 25: 19.

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 for detailed protocols and support products.