

Rpb4 (yC-15): sc-26309

BACKGROUND

Organisms respond to environmental stress by adopting changes in gene expression at the transcriptional level. Eukaryotic RNA polymerase II is composed of more than 10 polypeptide chains. Rpb4, a nonessential subunit of the core RNA polymerase II has a role in non-stress-specific transcription and in the regulation of stress response in yeast. Rpb4 affects expression of a small yet significant fraction of the genome under both stressful and normal conditions. Rpb4 plays a dual role in regulating two subpathways, suppressing the Rpb9 subpathway and facilitating the Rad26 subpathway. The C-terminal 24 amino acids of Rpb4 are specifically involved in activation. The Rpb4 and Rpb7 subunits of yeast RNA polymerase II form a heterodimeric complex essential for promoter-directed transcription initiation in a reconstituted system. Although Rpb7 is the interacting partner of Rpb4, they play independent roles in transcriptional regulation of genes. Rpb4 migrates as the fourth largest subunit with a molecular mass of 32 kDa in yeast RNA polymerase II.

REFERENCES

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5. Li, S., and Smerdon, M.J. 2002. Rpb4 and Rpb9 mediate subpathways of transcription-coupled DNA repair in *Saccharomyces cerevisiae*. *Embo J.* 21: 5921-5929.
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SOURCE

Rpb4 (yC-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of Rpb4 of *Saccharomyces cerevisiae* origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-26309 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Rpb4 (yC-15) is recommended for detection of Rpb4 of *Saccharomyces cerevisiae* origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

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.

STORAGE

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

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.


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 Guaranteed

Try **PoI II RPB4 (2Y14): sc-101604**, our highly recommended monoclonal alternative to Rpb4 (yC-15).