

RNA pol β' (NT73): sc-101613

BACKGROUND

RNA polymerase transcribes DNA to synthesize RNA using the four ribonucleoside triphosphates as substrates. Prokaryotes contain a single RNA polymerase compared to three in eukaryotes. RNA polymerase β (RpoB or RNA pol β) refers to the β subunit of the RNA polymerase enzyme in bacterial cells. This subunit lies in the core enzyme which is responsible for RNA chain elongation. Assembly of the core polymerase enzyme is limited by β and β' subunit expression. The gene encoding for RNA pol β is under autogenous regulation, in which both holoenzyme and $\alpha 2\beta$ complex function as regulatory molecules with repressor activity.

REFERENCES

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SOURCE

RNA pol β' (NT73) is a mouse monoclonal antibody raised against RNA polymerase β' of *E. coli* origin, with epitope mapping to amino acids 1295-1417.

PRODUCT

Each vial contains 50 μ g IgG₁ in 500 μ l PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

RNA pol β' (NT73) is recommended for detection of RNA pol β' of *E. coli* origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)]; may cross-react with *Enterics*, *Borelia burgdorferi* and *Salmonella*.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-mouse IgG-HRP: sc-2005 (dilution range: 1:2000-1:32,000) or Cruz Marker™ compatible goat anti-mouse IgG-HRP: sc-2031 (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).

STORAGE

For immediate and continuous use, store at 4° C for up to one month. For sporadic use, freeze in working aliquots in order to avoid repeated freeze/thaw cycles. If turbidity is evident upon prolonged storage, clarify solution by centrifugation.

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.