# RNA pol β (NT63): sc-101596



The Power to Question

#### **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  $\beta$  (rpoB or RNA pol $\beta$ ) refers to the  $\beta$  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  $\beta$  and  $\beta'$  subunit expression. The gene encoding for RNA pol  $\beta$  is under autogenous regulation, in which both holoenzyme and  $\alpha2\beta$  complex function as regulatory molecules with repressor activity.

## **REFERENCES**

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# **SOURCE**

RNA pol  $\beta$  (NT63) is a mouse monoclonal antibody raised against RNA polymerase  $\beta$  of *E. coli* origin, with epitope mapping to amino acids 922-1090.

# **PRODUCT**

Each vial contains 100  $\mu l$  ascites containing  $lgG_{2a}$  with < 0.1% sodium azide.

#### **APPLICATIONS**

RNA pol  $\beta$  (NT63) is recommended for detection of RNA polymerase  $\beta$  of *E. coli* origin by Western Blotting (starting dilution to be determined by researcher, dilution range 1:100-1:5000).

## **SELECT PRODUCT CITATIONS**

 Chen, D., Wu, C., Zhao, S., Geng, Q., Gao, Y., Li, X., Zhang, Y. and Wang, Z. 2014. Three RNA binding proteins form a complex to promote differentiation of germline stem cell lineage in *Drosophila*. PLoS Genet. 10: e1004797.

# **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 for detailed protocols and support products.

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