



RNA pol σ H (3RH3): sc-101599

BACKGROUND

RNA polymerase transcribes DNA to synthesize RNA using the four ribonucleoside triphosphates as substrates. In prokaryotes, a catalytic core known as RNAP is formed from α , β and σ RNA pol subunits that, once complexed, can initiate transcription. RNA pol σ H, also known as rpoH, FAM, hin or htpR, is a 284 amino acid protein that belongs to the σ 70 factor family of *E. coli* peptides. σ factors, such as RNA pol σ H, function as initiation factors that work together to promote the attachment of RNA polymerase to target initiation sites. RNA pol σ H is specifically responsible for mediating the expression of heat shock promoters, thereby controlling the expression of heat shock proteins.

REFERENCES

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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.

SOURCE

RNA pol σ H (3RH3) is a mouse monoclonal antibody raised against RNA polymerase σ factor H of *E. coli* origin, with epitope mapping to amino acids 1-25.

PRODUCT

Each vial contains 100 μ l ascites containing IgG₁ with < 0.1% sodium azide. Also available azide-free for inhibition of transcription initiation in S-30 and *in vitro*, sc-101599 L, 100 μ l ascites.

APPLICATIONS

RNA pol σ H (3RH3) is recommended for detection of RNA pol σ H of *E. coli* origin by Western Blotting (starting dilution to be determined by researcher, dilution range 1:100-1:5000) and immunoprecipitation [1-2 μ l per 100-500 μ g of total protein (1 ml of cell lysate)].

Molecular Weight of RNA pol σ H: 32 kDa.

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.