TFIIS (yC-15): sc-26335



The Power to Question

BACKGROUND

RNA polymerase II (RNAP II) comprises a 12 subunit protein complex that mediates transcription. RNAP II contains a unique carboxy terminal domain (CTD), which consists of 52 repeats of the consensus heptapeptide Tyr-Ser-Pro-Thr-Ser-Pro-Ser. The RNAP II isoform with an unphosphorylated CTD associates with transcription initiation complexes, whereas the isoform with a phosphorylated CTD is involved in transcription elongation. Transcription elongation by RNAP II can be interrupted by various obstacles, including certain DNA sequences, DNA binding proteins, chromatin, and DNA lesions. Bypass of many of these impediments depends upon the transcription elongation factor SII (TFIIS), which cleaves the nascent transcript and promotes read-through past the block. In Saccharomyces cerevisiae, the PPR2 genes encodes the TFIIS protein, which consists of three domains. Characterization of Domains II and III, which represent the portion of the TFIIS protein necessary for elongation, show that they comprise a three-helix bundle and a zinc ribbon motif, respectively, joined by a linker region. Yeast cells lacking TFIIS grow slowly and display defects in mRNA metabolism.

REFERENCES

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SOURCE

TFIIS (yC-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of TFIIS 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-26335 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

TFIIS (yC-15) is recommended for detection of TFIIS of *Saccaromyces 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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