SANTA CRUZ BIOTECHNOLOGY, INC.

Spt8 (yG-17): sc-26263



BACKGROUND

The SPT8 gene encodes a 602 amino acid protein with an extremely acidic amino terminus. Spt8 is a component of the wild-type S. Cerevisiae SAGA complex which activates transcription of a subset of RNA-polymerase II-dependent genes. The interaction of TATA-binding protein (TBP) and SAGA at particular promoters and the functional interaction between Spt3 and TBP requires Spt8. Wild-type SAGA inhibits TBP binding to the HIS3 promoter *in vitro*, while SAGA lacking Spt3 or Spt8 is not inhibitory. Therefore, the composition of SAGA may be dynamic *in vivo* and regulated through dissociable inhibitory subunits. Normal transcription of Ty elements, and initiation of Ty transcription from delta sequences involves Spt8. Mutations in the Spt8 gene result in a sporulation defect and are strong suppressors of insertion mutations caused by Ty elements and long terminal repeat sequences called delta sequences.

REFERENCES

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- Belotserkovskaya, R., Sterner, D.E., Deng, M., Sayre, M.H., Lieberman, P.M., Berger, S.L. 2000. Inhibition of TATA-binding protein function by SAGA subunits Spt3 and Spt8 at Gcn4-activated promoters. Mol. Cell. Biol. 20: 634-647.
- Eisenmann, D.M., Chapon, C., Roberts, S.M., Dollard, C., Winston, F. 1994. The *Saccharomyces cerevisiae* Spt8 gene encodes a very acidic protein that is functionally related to Spt3 and TATA-binding protein. Genetics. 137: 647-657.
- Bhaumik, S.R., Green, M.R. 2002. Differential requirement of SAGA components for recruitment of TATA-box-binding protein to promoters *in vivo*. Mol. Cell. Biol. 22: 7365-7371.
- Sterner, D.E., Belotserkovskaya, R., Berger, S.L. 2002. SALSA, a variant of yeast SAGA, contains truncated Spt7, which correlates with activated transcription. Proc. Natl. Acad. Sci. 99: 11622-11627.

SOURCE

Spt8 (yG-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Spt8 of *Saccharomyces cerevisiae* origin.

PRODUCT

Each vial contains 200 μ g lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-26263 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

Spt8 (yG-17) is recommended for detection of Spt8 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 antigoat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker[™] Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2033 and Western Blotting Luminol Reagent: sc-2048.

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.