SPT16 (C-21): sc-5915



The Power to Question

BACKGROUND

Expression of protein-coding genes requires the association of specific transcription factors, RNA polymerase and various accessory factors. These accessory factors are distinguished as either histone acetyltransferases or ATPdependent chromatin-remodeling enzymes, which include FACT (for facilitates chromatin transcription), and they facilitate transcription initiation on DNA packaged into chromatin. FACT is a chromatin-specific elongation factor required for transcription of chromatin templates, and it specifically interacts with nucleosomes and histone H2A/H2B dimers to promote nucleosome disassembly upon transcription. FACT represents a complex between SPT16, a homolog of the Saccharomyces cerevisiae Spt16/Cdc68 protein, and the highmobility group (HMG)-1-like protein structure-specific recognition protein-1 (SSRP-1). Similar to other HMG domain containing proteins, which are characterized by their ability to bend target DNAs, SSRP1 and the murine ortholog T160 physically interact with serum response factors (SRF) and function as a positive co-regulatory proteins involved in modulating SRF-dependent gene expression.

CHROMOSOMAL LOCATION

Genetic locus: SUPT16H (human) mapping to 14q11.2.

SOURCE

SPT16 (C-21) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of SPT16 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-5915 P, $(100 \mu g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).$

RESEARCH USE

For research use only, not for use in diagnostic procedures.

APPLICATIONS

SPT16 (C-21) is recommended for detection of SPT16 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

SPT16 (C-21) is also recommended for detection of SPT16 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for SPT16 siRNA (h): sc-37875, SPT16 shRNA Plasmid (h): sc-37875-SH and SPT16 shRNA (h) Lentiviral Particles: sc-37875-V.

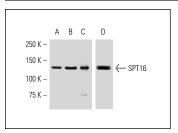
Molecular Weight of SPT16: 140 kDa.

Positive Controls: HeLa nuclear extract: sc-2120, A-673 nuclear extract: sc-2128 or HeLa + UV irradiated cell lysate: sc-2221.

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. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



Western blot analysis of SPT16 expression in HeLa (A) and A-673 (B) nuclear extracts and UV-treated HeLa whole cell lysate (C,D). Antibodies tested include SPT16 (C-21): sc-5915 (A,B,C) and SPT16 (H-300): sc-28734 (D).

STORAGE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.



Try SPT16 (D-3): sc-377028 or SPT16 (H-4): sc-165989, our highly recommended monoclonal alternatives to SPT16 (C-21).

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