SANTA CRUZ BIOTECHNOLOGY, INC.

TRFP (E-18): sc-5382

BACKGROUND

In mammalian cells, transcription is regulated in part by high molecular weight coactivating complexes that mediate signals between transcriptional activators and RNA polymerase. These complexes include SMCC (SRB and MED protein cofactor complex), which consists of various subunits that share homology with several components of the yeast transcriptional mediator complexes. SMCC associates with the RNAPII (RNA polymerase II) holoenzyme through Srb7 and, in turn, enhances gene-specific activation or repression induced by DNA-binding transcription factors. Srb7 also interacts with an additional member of the RNAPII holoenzyme, the human homolog of *Drosophila* TBP-related factor (TRF)-proximal protein (TRFP). TRFP synergistically associates with coactivators, including PC4 (positive coactivator 4) and USA (upstream stimulatory activity) of the RNAPII and SMCC complex, to enhance basal and gene-specific transcription.

CHROMOSOMAL LOCATION

Genetic locus: MED20 (human) mapping to 6p21.1; Med20 (mouse) mapping to 17 C.

SOURCE

TRFP (E-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of TRFP of human 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-5382 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-5382 X, 200 µg/0.1 ml.

APPLICATIONS

TRFP (E-18) is recommended for detection of TRFP of mouse, rat and 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

TRFP (E-18) is also recommended for detection of TRFP in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for TRFP siRNA (h): sc-38598, TRFP siRNA (m): sc-38599, TRFP shRNA Plasmid (h): sc-38598-SH, TRFP shRNA Plasmid (m): sc-38599-SH, TRFP shRNA (h) Lentiviral Particles: sc-38598-V and TRFP shRNA (m) Lentiviral Particles: sc-38599-V.

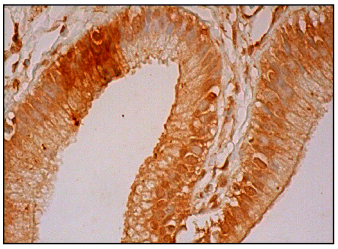
TRFP (E-18) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of TRFP: 26 kDa.

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. 4) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA



TRFP (E-18): sc-5382. Immunoperoxidase staining of formalin fixed, paraffin-embedded human gall bladder tissue showing nuclear and cytoplasmic staining of glandular cells.

SELECT PRODUCT CITATIONS

1. Sato, S., et al. 2003. A mammalian homolog of *Drosophila melanogaster* transcriptional coactivator intersex is a subunit of the mammalian mediator complex. J. Biol. Chem. 278: 49671-49674.
2. Tsutsui, T., et al. 2008. Human mediator kinase subunit Cdk11 plays a negative role in viral activator VP16-dependent transcriptional regulation. Genes Cells 13: 817-826.

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.