## SANTA CRUZ BIOTECHNOLOGY, INC.

# TRFP (H-124): sc-292260



### 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.

#### REFERENCES

- Aragona, M., et al. 2000. Immunohistochemical telomeric-repeat binding factor-1 expression in gastrointestinal tumors. Oncol. Rep. 7: 987-990.
- Matsutani, N., et al. 2001. Expression of telomeric repeat binding factor 1 and 2 and TRF1-interacting nuclear protein 2 in human gastric carcinomas. Int. J. Oncol. 19: 507-512.
- Yajima, T., et al. 2001. Telomerase reverse transcriptase and telomericrepeat binding factor protein 1 as regulators of telomerase activity in pancreatic cancer cells. Br. J. Cancer 85: 752-757.
- Seimiya, H., et al. 2002. The telomeric poly (ADP-ribose) polymerase, tankyrase 1, contains multiple binding sites for telomeric repeat binding factor 1 (TRF1) and a novel acceptor, 182 kDa tankyrase-binding protein (TAB182). J. Biol. Chem. 277: 14116-14126.

#### CHROMOSOMAL LOCATION

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

## SOURCE

TRFP (H-124) is a rabbit polyclonal antibody raised against amino acids 32-155 mapping within an internal region of TRFP of human origin.

#### PRODUCT

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

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-292260 X, 200  $\mu$ g/0.1 ml.

#### **STORAGE**

Store at 4° C, \*\*D0 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.

#### APPLICATIONS

TRFP (H-124) 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  $\mu$ g per 100-500  $\mu$ g 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).

TRFP (H-124) is also recommended for detection of TRFP in additional species, including equine, canine, bovine, porcine and avian.

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-38599-V and TRFP shRNA (m) Lentiviral Particles: sc-38599-V.

TRFP (H-124) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of TRFP: 26 kDa.

Positive Controls: TRFP (h2): 293T Lysate: sc-117170.

## **RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker<sup>™</sup> compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> 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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz<sup>™</sup> Mounting Medium: sc-24941.

## DATA





TRFP (H-124): sc-292260. Western blot analysis of TRFP expression in non-transfected: sc-117752 (A) and human TRFP transfected: sc-117170 (B) 293T whole cell lysates.

TRFP (H-124): sc-292260. Western blot analysis of TRFP expression in non-transfected: sc-117752 (**A**) and human TRFP transfected: sc-117200 (**B**) 293T whole cell lysates.

#### PROTOCOLS

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