

TRFP (G-11): sc-374247

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

1. Aragona, M., et al. 2000. Immunohistochemical telomeric-repeat binding factor-1 expression in gastrointestinal tumors. *Oncol. Rep.* 7: 987-990.
2. 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.
3. Yajima, T., et al. 2001. Telomerase reverse transcriptase and telomeric-repeat binding factor protein 1 as regulators of telomerase activity in pancreatic cancer cells. *Br. J. Cancer* 85: 752-757.
4. 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 (G-11) is a mouse monoclonal antibody raised against amino acids 32-155 mapping within an internal region of TRFP of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-374247 X, 200 µg/0.1 ml.

TRFP (G-11) is available conjugated to agarose (sc-374247 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-374247 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-374247 PE), fluorescein (sc-374247 FITC), Alexa Fluor® 488 (sc-374247 AF488), Alexa Fluor® 546 (sc-374247 AF546), Alexa Fluor® 594 (sc-374247 AF594) or Alexa Fluor® 647 (sc-374247 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-374247 AF680) or Alexa Fluor® 790 (sc-374247 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

TRFP (G-11) is recommended for detection of TRFP of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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).

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 (G-11) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

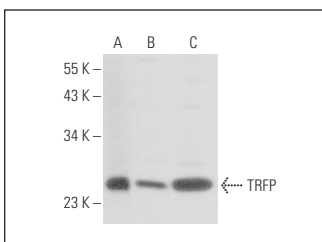
Molecular Weight of TRFP: 26 kDa.

Positive Controls: HeLa nuclear extract: sc-2120, RPMI2650 whole cell lysate: sc-364192 or Jurkat whole cell lysate: sc-2204.

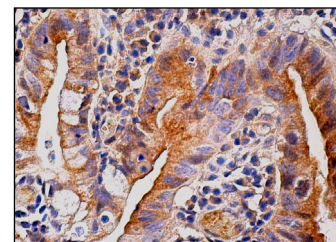
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



TRFP (G-11): sc-374247. Western blot analysis of TRFP expression in HeLa nuclear extract (A) and RPMI2650 (B) and Jurkat (C) whole cell lysates.



TRFP (G-11): sc-374247. Immunoperoxidase staining of formalin fixed, paraffin-embedded human gall bladder tissue showing cytoplasmic staining of glandular cells.

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.