SANTA CRUZ BIOTECHNOLOGY, INC.

# TBPIP (A-5): sc-514014

SANTA CRUZ BIOTECHNOLOGY

*The Power to Question*

## BACKGROUND

TBPIP (TBP-1-interacting protein), also known as PSMC3IP (PSMC3 interacting protein) or HOP2, is a 217 amino acid protein that localizes to the nucleus and is subject to phosphorylation by PKA, PKC or MAPK. Expressed at high levels in colon and testis, TBPIP functions to stimulate Dmc1-mediated strand exchange, thereby playing an important role in the pairing of homologous chromosomes during meiosis and during meiotic recombination. Human TBPIP shares 88% sequence identity with its mouse counterpart, suggesting a conserved role between species. TBPIP exists as multiple alternatively spliced isoforms and, when overexpressed, may be involved in the development of leiomyomas; benign soft tissue neoplasms that are found in smooth muscle. The gene encoding TBPIP maps to human chromosome 17, which comprises over 2.5% of the human genome and encodes over 1,200 genes.

## REFERENCES


1. Tanaka, T., et al. 1997. Molecular cloning and characterization of a novel TBP-1 interacting protein (TBPIP):enhancement of TBP-1 action on TAT by TBPIP. Biochem. Biophys. Res. Commun. 239: 176-181.
2. Ijichi, H., et al. 2000. Molecular cloning and characterization of a human homologue of TBPIP, a BRCA1 locus-related gene. Gene 248: 99-107.
3. Ko, L., et al. 2002. Identification and characterization of a tissue-specific coactivator, GT198, that interacts with the DNA-binding domains of nuclear receptors. Mol. Cell. Biol. 22: 357-369.
4. Enomoto, R., et al. 2006. Stimulation of DNA strand exchange by the human TBPIP/Hop2-MND1 complex. J. Biol. Chem. 281: 5575-5581.
5. Online Mendelian Inheritance in Man, OMIM™. 2007. Johns Hopkins University, Baltimore, MD. MIM Number: 608665. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/


## CHROMOSOMAL LOCATION

Genetic locus: PSMC3IP (human) mapping to 17q21.2; Psmc3ip (mouse) mapping to 11 D.

## SOURCE

TBPIP (A-5) is a mouse monoclonal antibody raised against amino acids 1-217 representing full length TBPIP of human origin.

## PRODUCT

Each vial contains 200 µg $IgG_1$ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

TBPIP (A-5) is available conjugated to agarose (sc-514014 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-514014 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-514014 PE), fluorescein (sc-514014 FITC), Alexa Fluor® 488 (sc-514014 AF488), Alexa Fluor® 546 (sc-514014 AF546), Alexa Fluor® 594 (sc-514014 AF594) or Alexa Fluor® 647 (sc-514014 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-514014 AF680) or Alexa Fluor® 790 (sc-514014 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.


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## APPLICATIONS

TBPIP (A-5) is recommended for detection of TBPIP 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for TBPIP siRNA (h): sc-93606, TBPIP siRNA (m): sc-154122, TBPIP shRNA Plasmid (h): sc-93606-SH, TBPIP shRNA Plasmid (m): sc-154122-SH, TBPIP shRNA (h) Lentiviral Particles: sc-93606-V and TBPIP shRNA (m) Lentiviral Particles: sc-154122-V.

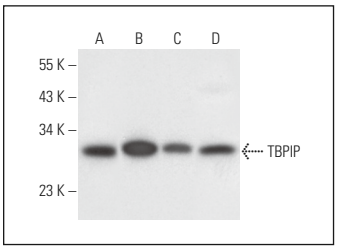
Molecular Weight of TBPIP: 24 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227, Jurkat whole cell lysate: sc-2204 or K-562 whole cell lysate: sc-2203.

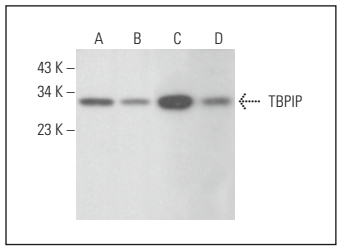
## RECOMMENDED SUPPORT REAGENTS

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.

## DATA




TBPIP (A-5): sc-514014. Western blot analysis of TBPIP expression in Hep G2 (**A**), Jurkat (**B**), K-562 (**C**) and U-251-MG (**D**) whole cell lysates.




TBPIP (A-5): sc-514014. Western blot analysis of TBPIP expression in Jurkat (**A**) and U-698-M (**B**) whole cell lysates, HeLa nuclear extract (**C**) and rat testis tissue extract (**D**).

## 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 for detailed protocols and support products.