

TBPIP (T-21): sc-134056

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

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6. Miyamoto, T., Koh, E., Sakugawa, N., Sato, H., Hayashi, H., Namiki, M. and Sengoku, K. 2008. Two single nucleotide polymorphisms in PRDM9 (MEISETZ) gene may be a genetic risk factor for Japanese patients with azoospermia by meiotic arrest. *J. Assist. Reprod. Genet.* 25: 553-557.

CHROMOSOMAL LOCATION

Genetic locus: PSMC3IP (human) mapping to 17q21.31.

SOURCE

TBPIP (T-21) is a Protein A purified rabbit polyclonal antibody raised against synthetic TBPIP peptide of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

RESEARCH USE

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

APPLICATIONS

TBPIP (T-21) is recommended for detection of TBPIP 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)] 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 shRNA Plasmid (h): sc-93606-SH and TBPIP shRNA (h) Lentiviral Particles: sc-93606-V.

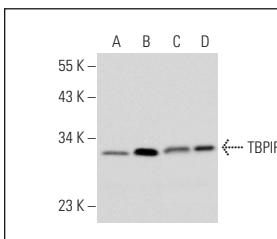
Molecular Weight of TBPIP: 24 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227, U-698-M whole cell lysate: sc-364799 or K-562 whole cell lysate: sc-2203.

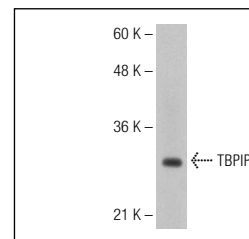
RECOMMENDED SECONDARY REAGENTS

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[™] compatible goat anti-rabbit IgG-HRP: sc-2030 (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).

DATA



TBPIP (T-21): sc-134056. Western blot analysis of TBPIP expression in Jurkat (A), K-562 (B) and U-698-M (C) whole cell lysates and HeLa nuclear extract (D).



TBPIP (T-21): sc-134056. Western blot analysis of TBPIP expression in Hep G2 whole cell lysate.

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 **TBPIP (A-5): sc-514014**, our highly recommended monoclonal alternative to TBPIP (T-21).