SANTA CRUZ BIOTECHNOLOGY, INC.

TBL1 (G-17): sc-34539

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The Power to Question

BACKGROUND

TBL1, for transducin β-like 1, is a ubiquitously expressed protein that contains six distinct β-transducin repeats, known also as WD40 repeats, within the C-terminal domain. Transducin β-like 1 Y-linked protein (TBL1Y), also designated F-box-like/WD-repeat protein, and transducin β-like 1 X protein (TBL1X), also known as SMAP55, are nuclear F-box-like proteins. They are important in the ubiquitin/19S proteasome complex recruitment to nuclear receptor-regulated transcription units. TBL1X is a part of the N-CoR repressor complex together with N-CoR1, N-CoR2, HDAC3, TBL1R, CORO2A and GPS2. It is also a component of the E3 ubiquitin ligase complex. TBL1X, which can interact with Histones H2B, H3a and H4, is similar to TBL1Y but is localized on chromosome Xp22.31. Defects in TBL1X may cause an X-linked human disorder called ocular albinism with late-onset sensorineural deafness (OASD). TBL1Y is an X-degenerate gene that is homologous to TBL1X. TBL1Y, a single-copy gene, localizes to human chromosome Yp11.2 in the male-specific region of chromosome Y (MSY). This region of the Y chromosome does not engage in X-Y crossover events. TBL1Y is primarily expressed in fetal brain and prostate. TBL1X and TBL1Y are crucial in nuclear receptor mediated transcription activation.

REFERENCES

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4. Skaletsky, H., et al. 2003. The male-specific region of the human Y chromosome is a mosaic of discrete sequence classes. Nature 423: 825-837.
5. Yoon, H.G., et al. 2003. Purification and functional characterization of the human N-CoR complex: the roles of HDAC3, TBL1 and TBLR1. EMBO J. 22: 1336-1346.
6. Perissi, V., et al. 2004. A corepressor/co-activator exchange complex required for transcriptional activation by nuclear receptors and other regulated transcription factors. Cell 116: 511-526.
7. Yan, H.T., et al. 2005. Molecular analysis of TBL1Y, a Y-linked homolog of TBL1X related with X-linked late-onset sensorineural deafness. J. Hum. Genet. 50: 175-181.
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SOURCE

TBL1 (G-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of TBL1Y 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-34539 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

TBL1 (G-17) is recommended for detection of TBL1X and TBL1XR1 of mouse and human origin, and TBL1Y of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

TBL1 (G-17) is also recommended for detection of TBL1X, TBL1XR1 and TBL1Y in additional species, including equine, canine, bovine, porcine and avian.

TBL1 (G-17) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of TBL1: 57 kDa.

Positive Controls: Mouse testis extract: sc-2405 or Y79 nuclear extract: sc-2126.

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) 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.

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.