

TBL1 (H-11): sc-137083

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.

CHROMOSOMAL LOCATION

Genetic locus: TBL1X (human) mapping to Xp22.31, TBL1Y (human) mapping to Yp11.2; Tbl1x (mouse) mapping to X A7.3.

SOURCE

TBL1 (H-11) is a mouse monoclonal antibody raised against amino acids 211-577 of TBL1X of human origin.

PRODUCT

Each vial contains 200 μ g IgG₁ 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-137083 X, 200 μ g/0.1 ml.

APPLICATIONS

TBL1 (H-11) is recommended for detection of TBL1X of mouse, rat and human origin and TBL1Y of human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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 TBL1X siRNA (m): sc-38889, TBL1X shRNA Plasmid (m): sc-38889-SH and TBL1X shRNA (m) Lentiviral Particles: sc-38889-V.

TBL1 (H-11) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

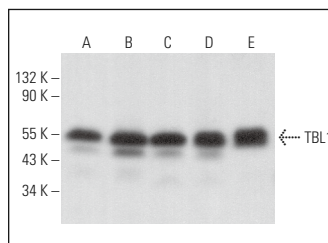
Molecular Weight of TBL1: 57 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, Caki-1 cell lysate: sc-2224 or IMR-32 cell lysate: sc-2409.

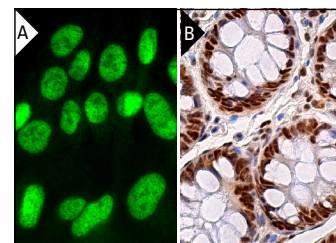
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ 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-IgG κ BP-FITC: sc-516140 or m-IgG κ 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-IgG κ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



TBL1 (H-11): sc-137083. Western blot analysis of TBL1 expression in HeLa (A), Caki-1 (B), IMR-32 (C), PC-3 (D) and 3T3-L1 (E) whole cell lysates.



TBL1 (H-11): sc-137083. Immunofluorescence staining of formalin-fixed Hep G2 cells showing nuclear localization (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human rectum tissue showing nuclear and cytoplasmic staining of glandular cells (B).

SELECT PRODUCT CITATIONS

1. Cho, H.I., et al. 2023. SETD5 regulates the OGT-catalyzed O-GlcNAcylation of RNA polymerase II, which is involved in the stemness of colorectal cancer cells. *Sci. Rep.* 13: 19885.

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.