SANTA CRUZ BIOTECHNOLOGY, INC.

TRIP13 (C-4): sc-514314

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Thyroid hormone receptors (TRs) are transcription factors that regulate the expression of specific genes in a hormone-dependent manner. TRIP13 (thyroid hormone receptor interactor 13), also called 16E1BP, is a transcription factor that interacts with the ligand binding domain of the thyroid receptor (TR) as well as a variety of target genes including human papilloma virus type 16 (HPV16) E1. Unlike most TRIP proteins which function only in the presence of hormones, TRIP13 does not require the presence of thyroid hormone to interact with TR. The association of TRIP13 with (HPV16) E1 suggests that TRIP13 may have tumor suppressor gene function. TRIP13 is a 432 amino acid protein with two different isoforms produced by alternative splicing.

CHROMOSOMAL LOCATION

Genetic locus: TRIP13 (human) mapping to 5p15.33; Trip13 (mouse) mapping to 13 C1.

SOURCE

TRIP13 (C-4) is a mouse monoclonal antibody raised against amino acids 1-180 mapping at the N-terminus of TRIP13 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.

TRIP13 (C-4) is available conjugated to agarose (sc-514314 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-514314 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-514314 PE), fluorescein (sc-514314 FITC), Alexa Fluor® 488 (sc-514314 AF488), Alexa Fluor® 546 (sc-514314 AF546), Alexa Fluor® 594 (sc-514314 AF594) or Alexa Fluor® 647 (sc-514314 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-514314 AF680) or Alexa Fluor® 790 (sc-514314 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

LRCH4 (F-3) is recommended for detection of LRCH4 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 LRCH4 siRNA (h): sc-72376, LRCH4 siRNA (m): sc-72377, LRCH4 shRNA Plasmid (h): sc-72376-SH, LRCH4 shRNA Plasmid (m): sc-72377-SH, LRCH4 shRNA (h) Lentiviral Particles: sc-72376-V and LRCH4 shRNA (m) Lentiviral Particles: sc-72377-V.

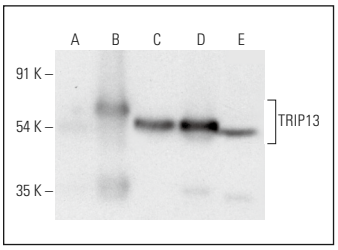
Molecular Weight of TRIP13: 49 kDa.

Positive Controls: TRIP13 (h): 293T Lysate: sc-369956, HeLa whole cell lysate: sc-2200 or Jurkat whole cell lysate: sc-2204.

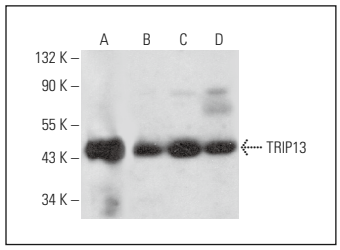
RECOMMENDED SUPPORT REAGENTS

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.

DATA



TRIP13 (C-4): sc-514314. Western blot analysis of TRIP13 expression in non-transfected 293T: sc-117752 (**A**), human TRIP13 transfected 293T: sc-369956 (**B**), Jurkat (**C**), HeLa (**D**) and Hep G2 (**E**) whole cell lysates.



TRIP13 (C-4): sc-514314. Western blot analysis of TRIP13 expression in Jurkat (**A**), NIH/3T3 (**B**) and F9 (**C**) whole cell lysates and rat testis tissue extract (**D**).

SELECT PRODUCT CITATIONS

1. Li, C., et al. 2021. TRIP13 modulates protein deubiquitination and accelerates tumor development and progression of B cell malignancies. J. Clin. Invest. 131: e146893.
2. Lu, W., et al. 2022. TRIP13/FLNA complex promotes tumor progression and is associated with unfavorable outcomes in melanoma. J. Oncol. 2022: 1419179.

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.