

TRIP15 (42): sc-136511

BACKGROUND

TRIP1-TRIP15 genes encode thyroid hormone receptor β (TR β)-binding proteins. TRIP15, along with Cops2 and Alien comprise the second subunit (CSN2) of the COP9 signalosome (CSN), an eight-subunit complex with a variety of functions. CSN regulates Skp1-cullin-F-box protein (SCF) ubiquitinating ligases by deconjugating Nedd-8 from the Cul1 component of the SCF, and also associates with protein kinase activities targeting p53, c-Jun, and I κ B. Consequently, inhibition of SCF ubiquitin ligase activity occurs, and cell cycle progression halts at the transition from G₁ to S phase. TRIP15 contains an acidic region in the N-terminus, a putative zinc finger in the C-terminus, and a central hydrophobic core region flanked by two putative α -helical structures and a nuclear localization signal.

REFERENCES

- Cohen, H., et al. 2000. Interaction between interferon consensus sequence-binding protein and COP9/signalosome subunit CSN2 (TRIP15). A possible link between interferon regulatory factor signaling and the COP9/signalosome. *J. Biol. Chem.* 275: 39081-39089.
- Yang, X., et al. 2002. The COP9 signalosome inhibits p27^{Kip1} degradation and impedes G₁ to S phase progression via deneddylation of SCF CUL-1. *Curr. Biol.* 12: 667-672.
- Katoh, M., et al. 2003. Identification and characterization of TRIP8 gene in silico. *Int. J. Mol. Med.* 12: 817-821.
- Lykke-Andersen, K., et al. 2003. Disruption of the COP9 signalosome CSN2 subunit in mice causes deficient cell proliferation, accumulation of p53 and cyclin E, and early embryonic death. *Mol. Cell. Biol.* 23: 6790-6797.
- Akiyama, H., et al. 2003. Implication of TRIP15/CSN2 in early stage of neuronal differentiation of P19 embryonal carcinoma cells. *Brain Res. Dev.* 140: 45-56.

CHROMOSOMAL LOCATION

Genetic locus: COPS2 (human) mapping to 15q21.1; Cops2 (mouse) mapping to 2 F1.

SOURCE

TRIP15 (42) is a mouse monoclonal antibody raised against amino acids 172-299 of TRIP15 of human origin.

PRODUCT

Each vial contains 200 μ g IgG_{2b} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

TRIP15 (42) is available conjugated to agarose (sc-136511 AC), 500 μ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-136511 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-136511 PE), fluorescein (sc-136511 FITC), Alexa Fluor[®] 488 (sc-136511 AF488), Alexa Fluor[®] 594 (sc-136511 AF594) or Alexa Fluor[®] 647 (sc-136511 AF647), 200 μ g/ml, for IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-136511 AF680) or Alexa Fluor[®] 790 (sc-136511 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

TRIP15 (42) is recommended for detection of TRIP15 of mouse, rat, human and canine origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)].

Suitable for use as control antibody for TRIP15 siRNA (h): sc-43546, TRIP15 siRNA (m): sc-43547, TRIP15 shRNA Plasmid (h): sc-43546-SH, TRIP15 shRNA Plasmid (m): sc-43547-SH, TRIP15 shRNA (h) Lentiviral Particles: sc-43546-V and TRIP15 shRNA (m) Lentiviral Particles: sc-43547-V.

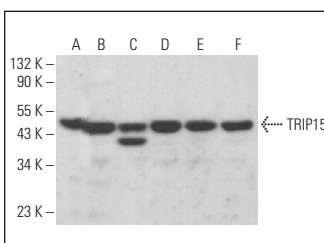
Molecular Weight of TRIP15: 50 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, Hep G2 cell lysate: sc-2227 or Jurkat whole cell lysate: sc-2204.

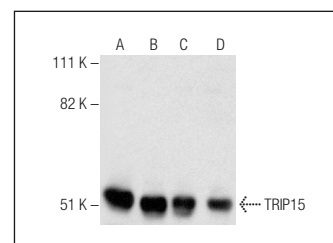
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-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).

DATA



TRIP15 (42): sc-136511. Western blot analysis of TRIP15 expression in HeLa (A), HEK293 (B), OVCAR-3 (C), C2C12 (D), A-10 (E) and L6 (F) whole cell lysates.



TRIP15 (42): sc-136511. Western blot analysis of TRIP15 expression in HeLa (A), Jurkat (B), NCI-H1299 (C) and Hep G2 (D) whole cell lysates.

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.