

TRIP15 (35): sc-136446

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

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- 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. Brain Res.* 140: 45-56.
- Akiyama, H., et al. 2003. The role of transcriptional corepressor NIF3L1 in early stage of neural differentiation via cooperation with TRIP15/CSN2. *J. Biol. Chem.* 278: 10752-10762.

CHROMOSOMAL LOCATION

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

SOURCE

TRIP15 (35) 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.

STORAGE

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

APPLICATIONS

TRIP15 (35) 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), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)] and immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

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.

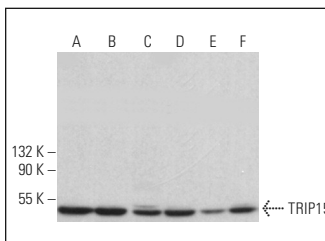
Molecular Weight of TRIP15: 50 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, Jurkat whole cell lysate: sc-2204 or c4 whole cell lysate: sc-364186.

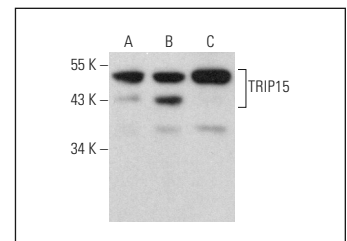
RECOMMENDED SUPPORT REAGENTS

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.

DATA



TRIP15 (35): sc-136446. Western blot analysis of TRIP15 expression in HeLa (A), Jurkat (B), c4 (C), C6 (D), NTERA-2 cl.D1 (E) and A-10 (F) whole cell lysates.



TRIP15 (35): sc-136446. Western blot analysis of TRIP15 expression in EOC 20 (A) and L6 (B) whole cell lysates and rat testis tissue extract (C).

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.