

# TRIP15 (C-17): sc-28414

## BACKGROUND

TRIP1-TRIP15 genes encode thyroid hormone receptor  $\beta$  (TR  $\beta$ )-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 Nedd8 from the Cul1 component of the SCF, and also associates with protein kinase activities targeting p53, c-Jun, and I $\kappa$ B. Consequently, inhibition of SCF ubiquitin ligase activity occurs, and cell cycle progression halts at the transition from G<sub>1</sub> 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 2 putative  $\alpha$ -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 G<sub>1</sub> to S phase progression via deneddylation of SCF Cul1. *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 Nif31 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 (C-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of Thyroid receptor interacting protein 15 of human origin.

## STORAGE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.

## PRODUCT

Each vial contains 200  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-28414 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

TRIP15 (C-17) is recommended for detection of TRIP15 of mouse, rat and 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).

TRIP15 (C-17) is also recommended for detection of TRIP15 in additional species, including equine, canine, bovine, porcine and avian.

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, A-431 whole cell lysate: sc-2201 or Jurkat whole cell lysate: sc-2204.

## 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.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.