SANTA CRUZ BIOTECHNOLOGY, INC.

TRIM34 (T-13): sc-161248

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Tripartite motif-containing protein 34 (TRIM34), also known as RING-finger protein 21 (RNF21) or interferon-responsive finger protein 1 (IFP1), is a 488 amino acid member of the TRIM family, also known as the RING-B-box coiled-coil (RBCC) family. Members of the RBCC family have an N-terminal RING finger, followed by one or two zinc-binding domains (B-box domains), a leucine coiled-coil region and a variable C-terminal domain. Three isoforms of TRIM34 exist as a result of alternative splicing events. Isoform 1, the most abundant isoform, is highly expressed in placenta, spleen, colon and peripheral blood leukocytes. Studies have shown that interferon (IFN) stimulation leads to an upregulation of TRIM34. These findings suggest that TRIM34 maybe a downstream effector that mediates IFN activities.

REFERENCES

1. Orimo, A., et al. 2000. Molecular cloning of RING-finger protein 21 (RNF21)/ interferon-responsive finger protein (IFP1), which possesses two RING-B-box coiled-coil domains in tandem. Genomics 69: 143-149.
2. Meroni, G. and Diez-Roux, G. 2005. TRIM/RBCC, a novel class of "single protein RING finger" E3 ubiquitin ligases. Bioessays 27: 1147-1157.
3. Short, K.M. and Cox, T.C. 2006. Subclassification of the RBCC/TRIM superfamily reveals a novel motif necessary for microtubule binding. J. Biol. Chem. 281: 8970-8980.
4. Massiah, M.A., et al. 2006. Solution structure of the RBCC/TRIM B-box1 domain of human MID1: B-box with a RING. J. Mol. Biol. 358: 532-545.
5. Li, X., et al. 2006. Functional replacement of the RING, B-box 2, and coiled-coil domains of tripartite motif 5α (TRIM5α) by heterologous TRIM domains. J. Virol. 80: 6198-6206.
6. Si, Z., et al. 2006. Evolution of a cytoplasmic tripartite motif (TRIM) protein in cows that restricts retroviral infection. Proc. Natl. Acad. Sci. USA 103: 7454-7459.
7. Sawyer, S.L., et al. 2007. Discordant evolution of the adjacent antiretroviral genes TRIM22 and TRIM5 in mammals. PLoS Pathog. 3: e197.
8. Li, X., et al. 2007. Unique features of TRIM5α among closely related human TRIM family members. Virology 360: 419-433.

CHROMOSOMAL LOCATION

Genetic locus: TRIM34 (human) mapping to 11p15.4.

SOURCE

TRIM34 (T-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of TRIM34 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-161248 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

TRIM34 (T-13) is recommended for detection of TRIM34 of human origin by Western Blotting (starting dilution 1:200, 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 TRIM34 siRNA (h): sc-96814, TRIM34 shRNA Plasmid (h): sc-96814-SH and TRIM34 shRNA (h) Lentiviral Particles: sc-96814-V.

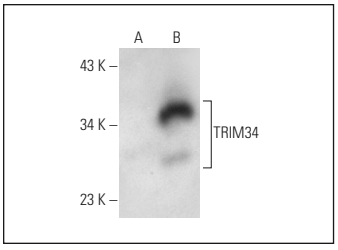
Molecular Weight of TRIM34: 57 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204 or TRIM34 (h): 293T Lysate: sc-174882.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



TRIM34 (T-13): sc-161248. Western blot analysis of TRIM34 expression in non-transfected: sc-117752 (**A**) and human TRIM34 transfected: sc-174882 (**B**) 293T 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 or our catalog for detailed protocols and support products.