

TRIM52 (3-YD23): sc-135589

BACKGROUND

The tripartite motif (TRIM) family of proteins are characterized by a conserved TRIM domain that includes a coiled-coil region, a B-box type zinc finger, one RING finger and three zinc-binding domains. TRIM52 (tripartite motif-containing 52), also known as RNF102 (RING finger protein 102), is a 297 amino acid protein that belongs to the TRIM family and contains one B box-type zinc fingers and one RING-type zinc finger. The gene encoding TRIM52 maps to chromosome 5, which is associated with Cockayne syndrome through the ERCC8 gene and familial adenomatous polyposis through the adenomatous polyposis coli (APC) tumor suppressor gene. Treacher Collins syndrome is also chromosome 5 associated and is caused by insertions or deletions within the TCOF1 gene. Deletion of the p arm of chromosome 5 leads to Cri du chat syndrome. Deletion of 5q or chromosome 5 altogether is common in therapy-related acute myelogenous leukemias and myelodysplastic syndrome.

REFERENCES

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2. Villa, N., et al. 2007. Fetal trisomy 5 mosaicism: case report and literature review. *Am. J. Med. Genet. A* 143A: 2343-2346.
3. Shadduck, R.K., et al. 2007. Recent advances in myelodysplastic syndromes. *Exp. Hematol.* 35: 137-143.
4. Falini, B., et al. 2007. Translocations and mutations involving the nucleophosmin (NPM1) gene in lymphomas and leukemias. *Haematologica* 92: 519-532.
5. Valent, P. 2008. Revealing the pathogenesis of the 5q- syndrome. *Eur. J. Clin. Invest.* 38: 539-540.
6. Buysse, K., et al. 2008. Mapping of 5q35 chromosomal rearrangements within a genomically unstable region. *J. Med. Genet.* 45: 672-678.
7. Azman, B.Z., et al. 2008. Two cases of deletion 5p syndrome: one with paternal involvement and another with atypical presentation. *Singapore Med. J.* 49: e98-e100.

CHROMOSOMAL LOCATION

Genetic locus: TRIM52 (human) mapping to 5q35.3.

SOURCE

TRIM52 (3-YD23) is a mouse monoclonal antibody raised against recombinant TRIM52 protein of human origin.

PRODUCT

Each vial contains 100 µg IgG_{2a} 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

TRIM52 (3-YD23) is recommended for detection of TRIM52 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)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for TRIM52 siRNA (h): sc-91594, TRIM52 shRNA Plasmid (h): sc-91594-SH and TRIM52 shRNA (h) Lentiviral Particles: sc-91594-V.

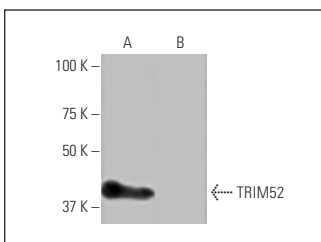
Molecular Weight of TRIM52: 35 kDa.

Positive Controls: human TRIM52 transfected 293T whole cell lysate.

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).

DATA



TRIM52 (3-YD23): sc-135589. Western blot analysis of TRIM52 expression in human TRIM52 transfected (A) and non-transfected (B) 293T whole cell lysates.

SELECT PRODUCT CITATIONS

1. Mu, X., et al. 2019. TRIM52 regulates the proliferation and invasiveness of lung cancer cells via the Wnt/β-catenin pathway. *Oncol. Rep.* 41: 3325-3334.
2. Zhou, J., et al. 2019. Tripartite motif protein 52 (TRIM52) promoted fibrosis in LX-2 cells through PPM1A-mediated Smad2/3 pathway. *Cell Biol. Int.* E-published.
3. Sun, J., et al. 2020. TRIM52 positively mediates NFκB to promote the growth of human benign prostatic hyperplasia cells through affecting TRAF2 ubiquitination. *Life Sci.* 259: 118380.
4. Zhang, P., et al. 2020. Tripartite motif containing 52 positively regulates NFκB signaling by promoting IκB-α ubiquitination in lipopolysaccharide-treated microglial cell activation. *Med. Sci. Monit.* 26: e925356.

RESEARCH USE

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