SANTA CRUZ BIOTECHNOLOGY, INC.

TRIM35 (31-M): sc-100880

BACKGROUND

TRIM35 (tripartite motif-containing 35), also known as HLS5 (hemopoietic lineage switch protein 5) or MAIR (macrophage-derived apoptosis-inducing RBCC protein), is a widely expressed 493 amino acid protein that belongs to the TRIM/RBCC (RING finger, B box, coiled-coil) family. TRIM35 contains a B box-type zinc finger, a coiled-coil domain, a SPRY domain and a RING-type zinc finger, a motif that has zinc-chelating activity and is involved in mediating protein-protein and protein-DNA interactions. Localizing to cytoplasmic granules and punctate nuclear bodies, TRIM35 is believed to play a role in the cell death mechanism. The forced expression of TRIM35 in HeLa cells results in the inhibition of tumorigenicity, cell growth and clonogenicity. In addition, the gene encoding TRIM35 localizes to a region of chromosome 8 that has been implicated in a number of leukemias and solid tumors. This suggests that TRIM35 may function as a tumor suppressor.

REFERENCES

1. Reymond, A., et al. 2001. The tripartite motif family identifies cell compartments. EMBO J. 20: 2140-2151
2. Kimura, F., et al. 2003. Cloning and characterization of a novel RING-B-box-coiled-coil protein with apoptotic function. J. Biol. Chem. 278: 25046-25054.
3. Lalonde, J.P., et al. 2004. HLS5, a novel RBCC (ring finger, B box, coiled-coil) family member isolated from a hemopoietic lineage switch, is a candidate tumor suppressor. J. Biol. Chem. 279: 8181-8189.
4. Kitamura, K., et al. 2005. The RING-finger protein haprin: domains and function in the acrosome reaction. Curr. Protein Pept. Sci. 6: 567-574.
5. 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.
6. Bouyain, S. and Leahy, D.J. 2007. Structure-based mutagenesis of the substrate-recognition domain of Nrdp1/FLRF identifies the binding site for the receptor tyrosine kinase ErbB3. Protein Sci. 16: 654-661.
7. Tao, H., et al. 2008. Structure of the MID1 tandem B-boxes reveals an interaction reminiscent of intermolecular ring heterodimers. Biochemistry 47: 2450-2457.

CHROMOSOMAL LOCATION

Genetic locus: TRIM35 (human) mapping to 8p21.2.

SOURCE

TRIM35 (31-M) is a mouse monoclonal antibody raised against recombinant TRIM35 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

TRIM35 (31-M) is recommended for detection of TRIM35 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), immunohistochemistry (including paraffin-embedded sections) (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 TRIM35 siRNA (h): sc-76748, TRIM35 shRNA Plasmid (h): sc-76748-SH and TRIM35 shRNA (h) Lentiviral Particles: sc-76748-V.

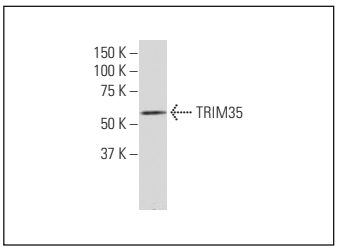
Molecular Weight of TRIM35: 59 kDa.

Positive Controls: K-562 whole cell lysate: sc-2203.

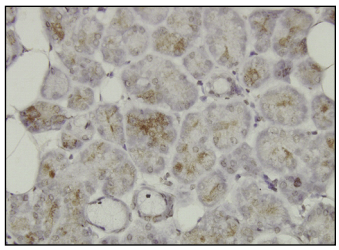
RECOMMENDED SUPPORT REAGENTS

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). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



TRIM35 (31-M): sc-100880. Western blot analysis of TRIM35 expression in K-562 whole cell lysate.



TRIM35 (31-M): sc-100880. Immunoperoxidase staining of formalin-fixed, paraffin-embedded human salivary gland tissue showing nuclear and cytoplasmic localization.

SELECT PRODUCT CITATIONS

1. Sun, N., et al. 2020. TRIM35 mediates protection against influenza infection by activating TRAF3 and degrading viral PB2. Protein Cell 11: 894-914.

RESEARCH USE

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