

TRIM35 (H-21): sc-134121

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., Meroni, G., Fantozzi, A., Merla, G., Cairo, S., Luzi, L., Riganelli, D., Zanaria, E., Messali, S., Cainarca, S., Guffanti, A., Minucci, S., Pelicci, P.G. and Ballabio, A. 2001. The tripartite motif family identifies cell compartments. *EMBO J.* 20: 2140-2151
2. Kimura, F., Suzu, S., Nakamura, Y., Nakata, Y., Yamada, M., Kuwada, N., Matsumura, T., Yamashita, T., Ikeda, T., Sato, K. and Motoyoshi, K. 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., Lim, R., Ingley, E., Tilbrook, P.A., Thompson, M.J., McCulloch, R., Beaumont, J.G., Wicking, C., Eyre, H.J., Sutherland, G.R., Howe, K., Solomon, E., Williams, J.H. and Klincken, S.P. 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., Tanaka, H. and Nishimune, Y. 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., Simmons, B.N., Singireddy, S., Jakkidi, M., Short, K.M., Cox, T.C. and Massiah, M.A. 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 (H-21) is an affinity purified rabbit polyclonal antibody raised against synthetic TRIM35 peptide of human origin.

PRODUCT

Each vial contains 50 µg IgG in 500 µl PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

APPLICATIONS

TRIM35 (H-21) 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)] 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.

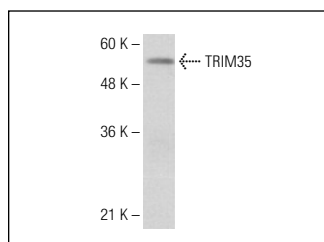
Molecular Weight of TRIM35: 59 kDa.

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

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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).

DATA



TRIM35 (H-21): sc-134121. Western blot analysis of TRIM35 expression in Hep G2 whole cell lysate.

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.