SANTA CRUZ BIOTECHNOLOGY, INC.

TRIM56 (D-16): sc-249084

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The Power to Question

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. TRIM proteins are involved in a wide variety of cellular processes such as cell development, proliferation, differentiation, oncogenesis and apoptosis. Many TRIM proteins are induced by type I and type II interferons, making them crucial for development of pathogen-resistance. TRIM56 (tripartite motif-containing 56), also known as RNF109 (RING finger protein 109), is a 755 amino acid protein that contains a variety of domains that are characteristic to TRIM proteins, including a RING-type zinc finger and a B box-type zinc finger. There are three isoforms of TRIM56 that are produced as a result of alternative splicing events. TRIM56 is encoded by a gene located on human chromosome 7q22.1.

REFERENCES

1. Jensen, K., et al. 2001. PML protein isoforms and the RBCC/TRIM motif. Oncogene 20: 7223-7233.
2. Nisole, S., et al. 2005. TRIM family proteins: retroviral restriction and antiviral defence. Nat. Rev. Microbiol. 3: 799-808.
3. Ozato, K., et al. 2008. TRIM family proteins and their emerging roles in innate immunity. Nat. Rev. Immunol. 8: 849-860.
4. Du Pasquier, L. 2009. Fish "n" TRIMs. J. Biol. 8: 50.
5. McNab, F.W., et al. 2010. Tripartite-motif proteins and innate immune regulation. Curr. Opin. Immunol. 23: 46-56.
6. Chu, Y. and Yang, X. 2010. SUMO E3 ligase activity of TRIM proteins. Oncogene 30: 1108-1116.
7. Munir, M. 2010. TRIM proteins: another class of viral victims. Sci. Signal. 3: jc2.

CHROMOSOMAL LOCATION

Genetic locus: TRIM56 (human) mapping to 7q22.1; Trim56 (mouse) mapping to 5 G2.

SOURCE

TRIM56 (D-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of TRIM56 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-249084 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

TRIM56 (D-16) is recommended for detection of TRIM56 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); non cross-reactive with other TRIM family members.

TRIM56 (D-16) is also recommended for detection of TRIM56 in additional species, including equine, canine and bovine.

Suitable for use as control antibody for TRIM56 siRNA (h): sc-89565, TRIM56 siRNA (m): sc-154658, TRIM56 shRNA Plasmid (h): sc-89565-SH, TRIM56 shRNA Plasmid (m): sc-154658-SH, TRIM56 shRNA (h) Lentiviral Particles: sc-89565-V and TRIM56 shRNA (m) Lentiviral Particles: sc-154658-V.

Molecular Weight of TRIM56 isoforms 1/2/3: 81/34/29 kDa.

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.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.