

# TRIM48 (D-14): sc-139218

## 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. Many TRIM proteins are induced by type I and type II interferons, making them crucial for development of pathogen-resistance. TRIM48 (tripartite motif-containing protein 48), also known as RING finger protein 101, is a 208 amino acid protein that contains one RING-type zinc finger and one B box-type zinc finger. The gene encoding TRIM48 maps to human chromosome 11, which houses over 1,400 genes and comprises nearly 4% of the human genome. Jervell and Lange-Nielsen syndrome, Jacobsen syndrome, Niemann-Pick disease, hereditary angioedema and Smith-Lemli-Opitz syndrome are associated with defects in genes that maps to chromosome 11.

## REFERENCES

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2. Nisole, S., et al. 2005. TRIM family proteins: retroviral restriction and antiviral defence. *Nat. Rev. Microbiol.* 3: 799-808.
3. Towers, G.J. 2007. The control of viral infection by tripartite motif proteins and cyclophilin A. *Retrovirology* 4: 40.
4. Ozato, K., et al. 2008. TRIM family proteins and their emerging roles in innate immunity. *Nat. Rev. Immunol.* 8: 849-860.
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6. Yang, K., et al. 2009. TRIM21 is essential to sustain IFN regulatory factor 3 activation during antiviral response. *J. Immunol.* 182: 3782-3792.
7. Carthagena, L., et al. 2009. Human TRIM gene expression in response to interferons. *PLoS ONE* 4: e4894.
8. Munir, M. 2010. TRIM proteins: another class of viral victims. *Sci. Signal.* 3: jc2.

## CHROMOSOMAL LOCATION

Genetic locus: TRIM48 (human) mapping to 11q11.

## SOURCE

TRIM48 (D-14) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of TRIM48 of human origin.

## PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-139218 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

TRIM48 (D-14) is recommended for detection of TRIM48 of human origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:25, dilution range 1:25-1:250) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with other TRIM family members.

Suitable for use as control antibody for TRIM48 siRNA (h): sc-96902, TRIM48 shRNA Plasmid (h): sc-96902-SH and TRIM48 shRNA (h) Lentiviral Particles: sc-96902-V.

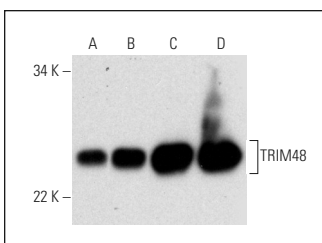
Molecular Weight of TRIM48: 24 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227, HeLa whole cell lysate: sc-2200 or human liver extract: sc-363766.

## 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). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## DATA



TRIM48 (D-14): sc-139218. Western blot analysis of TRIM48 expression in HeLa (A), SK-MEL-28 (B) and Hep G2 (C) whole cell lysates and human liver tissue extract (D).

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.