

# TRIM10 (F-24): sc-134114

## 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. TRIM10, also known as RING finger protein 9, RFB30 or HERF1, is a 481 amino acid protein that localizes to the cytoplasm. Expressed exclusively in hematopoietic tissues that contain developing myeloid, erythroid or megakaryocytic progenitors, TRIM10 has been shown to play a critical role in the terminal differentiation of erythroid cells. The functions of the various domains in TRIM10 suggest a role in the regulation of transcriptional signaling as well a mechanistic role in the morphological changes that occur during erythroid development. The expression of TRIM10 is dependent on upstream effectors such as PEBP2 $\beta$  and PU.1. Two named isoforms of TRIM10 exist as a result of alternative splicing events.

## REFERENCES

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- Orimo, A., et al. 2000. Molecular cloning of testis-abundant finger Protein/Ring finger protein 23 (RNF23), a novel RING-B box-coiled coil-B30.2 protein on the class I region of the human MHC. *Biochem. Biophys. Res. Commun.* 276: 45-51.
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- Harada, H., et al. 2006. Implications of somatic mutations in the AML1/RUNX1 gene in myelodysplastic syndrome (MDS): future molecular therapeutic directions for MDS. *Curr. Cancer Drug Targets* 6: 553-565.
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- Blaybel, R., et al 2008. Downregulation of the Spi-1/PU.1 oncogene induces the expression of TRIM10/HERF1, a key factor required for terminal erythroid cell differentiation and survival. *Cell Res.* 18: 834-845.

## CHROMOSOMAL LOCATION

Genetic locus: TRIM10 (human) mapping to 6p21.33.

## STORAGE

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

## SOURCE

TRIM10 (F-24) is a Protein A purified rabbit polyclonal antibody raised against synthetic TRIM10 peptide of human origin.

## PRODUCT

Each vial contains 100  $\mu$ g of IgG in PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

## APPLICATIONS

TRIM10 (F-24) is recommended for detection of TRIM10 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g 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 TRIM10 siRNA (h): sc-76732, TRIM10 shRNA Plasmid (h): sc-76732-SH and TRIM10 shRNA (h) Lentiviral Particles: sc-76732-V.

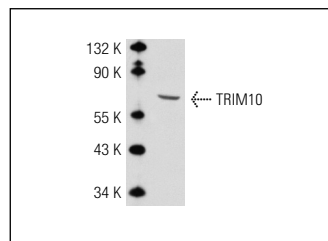
Molecular Weight of TRIM10: 55 kDa.

Positive Controls: 293T whole cell lysate or Hep G2 cell lysate: sc-2227.

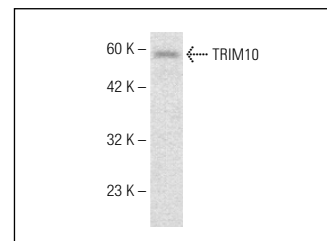
## RECOMMENDED SECONDARY REAGENTS

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<sup>™</sup> compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> 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



TRIM10 (F-24): sc-134114. Western blot analysis of TRIM10 expression in 293T whole cell lysate.



TRIM10 (F-24): sc-134114. Western blot analysis of TRIM10 expression in Hep G2 whole cell lysate.

## 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.