

# TRIM59 (H-23): sc-134123

## 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. TRIM59 (tripartite motif-containing 59), also known as MRF1 (modulator recognition factor 1), TSBF1 or RNF104, is a 403 amino acid single-pass membrane protein that contains one RING-type zinc finger and one B box-type zinc finger. One of several members of the TRIM family, TRIM59 is thought to repress ER $\alpha$ -mediated transcriptional activation and may play a role in the regulation of ER-dependent gene expression and the pathogenesis of breast cancer. The gene encoding TRIM59 maps to human chromosome 3, which houses over 1,100 genes, including a chemokine receptor (CKR) gene cluster and a variety of human cancer-related gene loci.

## REFERENCES

1. Chang, R., Xu, X. and Li, M.D. 2002. Molecular cloning, mapping and characterization of a novel mouse RING finger gene, Mrf1. *Gene* 291: 241-249.
2. Dobrzycka, K.M., Townson, S.M., Jiang, S. and Oesterreich, S. 2003. Estrogen receptor corepressors-a role in human breast cancer? *Endocr. Relat. Cancer* 10: 517-536.
3. Georgescu, S.P., Li, J.H., Lu, Q., Karas, R.H., Brown, M. and Mendelsohn, M.E. 2005. Modulator recognition factor 1, an AT-rich interaction domain family member, is a novel corepressor for estrogen receptor  $\alpha$ . *Mol. Endocrinol.* 19: 2491-2501.
4. Kominami, R. and Niwa, O. 2006. Radiation carcinogenesis in mouse thymic lymphomas. *Cancer Sci.* 97: 575-581.
5. Girault, I., Bièche, I. and Lidereau, R. 2006. Role of estrogen receptor  $\alpha$  transcriptional coregulators in tamoxifen resistance in breast cancer. *Maturitas* 54: 342-351.
6. Huang, W., Kane, J.K. and Li, M.D. 2008. Identification and characterization of a long isoform of human IFT80, IFT80-L. *Biochem. Biophys. Res. Commun.* 373: 653-658.

## CHROMOSOMAL LOCATION

Genetic locus: TRIM59 (human) mapping to 3q25.33; Trim59 (mouse) mapping to 3 E1.

## SOURCE

TRIM59 (H-23) is a Protein A purified rabbit polyclonal antibody raised against synthetic TRIM59 peptide of human origin.

## PRODUCT

Each vial contains 100  $\mu$ g IgG in 1.0 ml PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

## STORAGE

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

## APPLICATIONS

TRIM59 (H-23) is recommended for detection of TRIM59 of mouse, rat, human and canine 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)], 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 TRIM59 siRNA (h): sc-78105, TRIM59 siRNA (m): sc-154660, TRIM59 shRNA Plasmid (h): sc-78105-SH, TRIM59 shRNA Plasmid (m): sc-154660-SH, TRIM59 shRNA (h) Lentiviral Particles: sc-78105-V and TRIM59 shRNA (m) Lentiviral Particles: sc-154660-V.

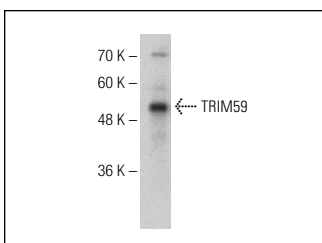
Molecular Weight of TRIM59: 47 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204.

## 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. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

## DATA



TRIM59 (H-23): sc-134123. Western blot analysis of TRIM59 expression in Jurkat 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.