

# TRIM16/16L (Y-20): sc-79772

## 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. TRIM16 (tripartite motif-containing 16), also known as EBBP (Estrogen-responsive B box protein), is a 564 amino acid protein that belongs to the TRIM family and contains two B box-type zinc fingers and one B30.2/SPRY domain. TRIM16 is highly expressed in testis, ovary, small intestine, colon, placenta, heart, skeletal muscle and mammary gland. However, it is more highly expressed in fetus than in the corresponding adult tissues. TRIM16 is also expressed in basal keratinocytes, where it is thought to play a role in the regulation of keratinocyte differentiation. Overexpression of TRIM16 has been shown to increase histone acetylation in retinoid-resistant cancer cells and therefore may be a potential target for therapeutic drugs. TRIM16L, also designated TRIM70, is a related protein that contains one B30.2/SPRY domain.

## REFERENCES

1. Liu, H.L., et al. 1998. The novel estrogen-responsive B-box protein (EBBP) gene is tamoxifen-regulated in cells expressing an estrogen receptor DNA-binding domain mutant. *Mol. Endocrinol.* 12: 1733-1748.
2. Beer, H.D., et al. 2002. The estrogen-responsive B-box protein: a novel regulator of keratinocyte differentiation. *J. Biol. Chem.* 277: 20740-20749.
3. Munding, C., et al. 2006. The estrogen-responsive B-box protein: a novel enhancer of interleukin-1 $\beta$  secretion. *Cell Death Differ.* 13: 1938-1949.
4. Cheung, B.B., et al. 2006. The estrogen-responsive B-box protein is a novel regulator of the retinoid signal. *J. Biol. Chem.* 281: 18246-18256.
5. Ozato, K., et al. 2008. TRIM family proteins and their emerging roles in innate immunity. *Nat. Rev. Immunol.* 8: 849-860.
6. Raif, A., et al. 2009. The estrogen-responsive B-box protein (EBBP) restores retinoid sensitivity in retinoid-resistant cancer cells via effects on histone acetylation. *Cancer Lett.* 277: 82-90.

## CHROMOSOMAL LOCATION

Genetic locus: Genetic locus: TRIM16 (human) mapping to 17p12, TRIM16L (human) mapping to 17p11.2; Trim16 (mouse) mapping to 11 B2.

## SOURCE

TRIM16/16L (Y-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of TRIM16 of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-79772 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## RESEARCH USE

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

## APPLICATIONS

TRIM16/16L (Y-20) is recommended for detection of TRIM16 of mouse, rat and human origin and TRIM16L 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)], 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).

TRIM16 (Y-20) is also recommended for detection of TRIM16 and TRIM16L in additional species, including bovine.

Suitable for use as control antibody for TRIM16 siRNA (m): sc-76741, TRIM16 shRNA Plasmid (m): sc-76741-SH and TRIM16 shRNA (m) Lentiviral Particles: sc-76741-V.

Molecular Weight of TRIM16: 64 kDa.

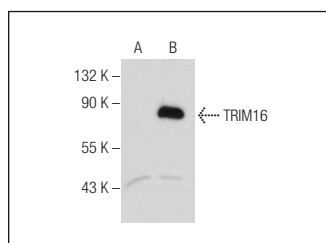
Molecular Weight of TRIM16L: 40 kDa.

Positive Controls: TRIM16 (h): 293T Lysate: sc-370211.

## 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<sup>™</sup> compatible donkey anti-goat IgG-HRP: sc-2033 (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). 3) 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<sup>™</sup> Mounting Medium: sc-24941.

## DATA



TRIM16/16L (Y-20): sc-79772. Western blot analysis of TRIM16 expression in non-transfected: sc-117752 (A) and human TRIM16 transfected: sc-370211 (B) 293T whole cell lysates.

## STORAGE

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

## PROTOCOLS

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