

# TRIM45 (N-16): sc-163470

## BACKGROUND

TRIM45 (tripartite motif-containing protein 45, RING finger protein 99) is a 580 amino acid nuclear and cytoplasmic protein. TRIM45 is a member of the TRIM/RBCC family and contains two B box-type zinc fingers, one filamin repeat, and one RING-type zinc finger. Tripartite motif (TRIM) proteins play important roles in a variety of cellular functions including cell proliferation, differentiation, development, oncogenesis, and apoptosis. TRIM45 is believed to act as a transcriptional repressor in mitogen-activated protein kinase signaling pathway and has been found to be expressed in skeletal muscle, brain, heart and pancreas. Overexpression of TRIM45 in COS-7 cells inhibits the transcriptional activities of EIK-1 and AP-1. The gene encoding TRIM45 is located on Chromosome 1 which is the largest human chromosome spanning about 260 million base pairs and making up 8% of the human genome. There are about 3,000 genes on chromosome 1, and considering the great number of genes there are also a large number of diseases associated with chromosome 1.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: TRIM45 (human) mapping to 1p13.1; Trim45 (mouse) mapping to 3 F2.2.

## SOURCE

TRIM45 (N-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of TRIM45 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-163470 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

TRIM45 (N-16) is recommended for detection of TRIM45 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.

TRIM45 (N-16) is also recommended for detection of TRIM45 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for TRIM45 siRNA (h): sc-88455, TRIM45 siRNA (m): sc-154653, TRIM45 shRNA Plasmid (h): sc-88455-SH, TRIM45 shRNA Plasmid (m): sc-154653-SH, TRIM45 shRNA (h) Lentiviral Particles: sc-88455-V and TRIM45 shRNA (m) Lentiviral Particles: sc-154653-V.

Molecular Weight of TRIM45: 64 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.

## STORAGE

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

## 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.