

# TACE (C-15): sc-6416

## BACKGROUND

Tumor necrosis factor  $\beta$  (TNF $\beta$ ), also known as lymphotoxin, is a pleiotropic cytokine. TNF $\alpha$ , also known as cachetin, is a cytokine that binds to the same receptors, producing an array of effects similar to those of TNF $\beta$ . TNF $\beta$  and TNF $\alpha$  share 30% amino acid homology and have similar biological activities. TNF $\beta$  is produced by activated lymphocytes, including CD4<sup>+</sup> T helper cell type 1 lymphocytes, CD8<sup>+</sup> lymphocytes and certain B lymphoblastoid cell lines. TNF $\alpha$  is produced by several different cell types, including lymphocytes, neutrophils and macrophages. TNF $\beta$  and TNF $\alpha$  can modulate many immune and inflammatory functions while having the ability to inhibit tumor growth. TACE (for TNF $\alpha$  converting enzyme) is a metalloproteinase that cleaves the membrane-bound TNF $\alpha$  precursor to release soluble TNF $\alpha$ .

## CHROMOSOMAL LOCATION

Genetic locus: ADAM17 (human) mapping to 2p25.1; Adam17 (mouse) mapping to 12 A1.3.

## SOURCE

TACE (C-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of TACE 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-6416 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

TACE (C-15) is recommended for detection of TACE precursor and mature chain of mouse, rat and 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).

TACE (C-15) is also recommended for detection of TACE precursor and mature chain in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for TACE siRNA (h): sc-36604, TACE siRNA (m): sc-36605, TACE shRNA Plasmid (h): sc-36604-SH, TACE shRNA Plasmid (m): sc-36605-SH, TACE shRNA (h) Lentiviral Particles: sc-36604-V and TACE shRNA (m) Lentiviral Particles: sc-36605-V.

Molecular Weight of glycosylated TACE: 120 kDa.

Molecular Weight of TACE active form: 80 kDa.

Positive Controls: BJAB whole cell lysate: sc-2207, NAMALWA cell lysate: sc-2234 or MOLT-4 cell lysate: sc-2233.

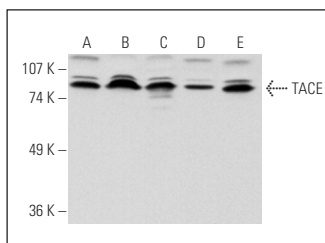
## STORAGE

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

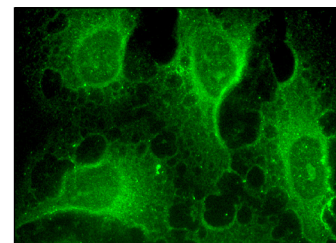
## RESEARCH USE

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

## DATA



TACE (C-15): sc-6416. Western blot analysis of TACE expression in BJAB (A), NAMALWA (B), MOLT-4 (C), CCRF-HSB-2 (D) and K-562 (E) whole cell lysates.



TACE (C-15): sc-6416. Immunofluorescence staining of methanol-fixed HeLa cells showing membrane and cytoplasmic localization.

## SELECT PRODUCT CITATIONS

- Peiretti, F., et al. 2003. Intracellular maturation and transport of tumor necrosis factor  $\alpha$  converting enzyme. *Exp. Cell Res.* 285: 278-285.
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Try **TACE (B-6): sc-390859**, our highly recommended monoclonal alternative to TACE (C-15). Also, for AC, HRP, FITC, PE, Alexa Fluor<sup>®</sup> 488 and Alexa Fluor<sup>®</sup> 647 conjugates, see **TACE (B-6): sc-390859**.