

# TACE (H-170): sc-25782

## 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 (H-170) is a rabbit polyclonal antibody raised against amino acids 235-404 mapping within an extracellular domain 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.

## STORAGE

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

## APPLICATIONS

TACE (H-170) is recommended for detection of TACE 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), 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).

TACE (H-170) is also recommended for detection of TACE 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.

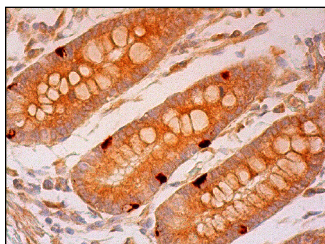
Molecular Weight of TACE active form: 80 kDa.

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

## 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



TACE (H-170): sc-25782. Immunoperoxidase staining of formalin fixed, paraffin-embedded human small intestine tissue showing cytoplasmic and membrane staining of glandular cells.

## SELECT PRODUCT CITATIONS

- Klessner, J.L., et al. 2009. EGFR and ADAMs cooperate to regulate shedding and endocytic trafficking of the desmosomal cadherin desmoglein 2. *Mol. Biol. Cell* 20: 328-337.
- Gutiérrez-López, M.D., et al. 2011. The sheddase activity of ADAM17/ TACE is regulated by the tetraspanin CD9. *Cell. Mol. Life Sci.* 68: 3275-3292.

## 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.

**MONOS**  
Satisfaction  
Guaranteed

Try **TACE (B-6): sc-390859**, our highly recommended monoclonal alternative to TACE (H-170). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **TACE (B-6): sc-390859**.