

TACE (K-20): sc-6417

BACKGROUND

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

CHROMOSOMAL LOCATION

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

SOURCE

TACE (K-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of TACE of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-6417 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

TACE (K-20) 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 μ g per 100-500 μ 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 (K-20) 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.

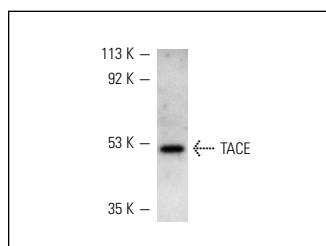
Molecular Weight of TACE active form: 80 kDa.

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

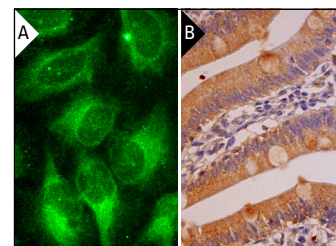
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use 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) 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™ Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA



TACE (K-20): sc-6417. Western blot analysis of human recombinant TACE cytosolic domain.



TACE (K-20): sc-6417. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic localization (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human small intestine tissue showing cytoplasmic staining of glandular cells (B).

SELECT PRODUCT CITATIONS

- Merchant, N.B., et al. 2008. TACE/ADAM17: a component of the epidermal growth factor receptor axis and a promising therapeutic target in colorectal cancer. *Clin. Cancer Res.* 14: 1182-1191.
- Saha, A., et al. 2010. *Helicobacter pylori* CagL activates ADAM17 to induce repression of the gastric H, K-ATPase α subunit. *Gastroenterology* 139: 239-248.
- Sisto, M., et al. 2010. Expression of pro-inflammatory TACE-TNF- α -amphiregulin axis in Sjögren's syndrome salivary glands. *Histochem. Cell Biol.* 134: 345-353.

RESEARCH USE

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



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Try **TACE (B-6): sc-390859**, our highly recommended monoclonal alternative to TACE (K-20).