

TACE (H-300): sc-13973



The Power to Question

BACKGROUND

Tumor necrosis factor β (TNF β), also known as lymphotoxin, is a pleiotropic cytokine. TNF α , also known as cachetin, 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 (H-300) is a rabbit polyclonal antibody raised against amino acids 1-300 mapping at the N-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.

APPLICATIONS

TACE (H-300) is recommended for detection of TACE precursor 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 (H-300) is also recommended for detection of TACE precursor in additional species, including equine, bovine and porcine.

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 K-562 whole cell lysate: sc-2203.

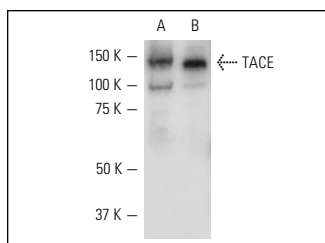
STORAGE

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

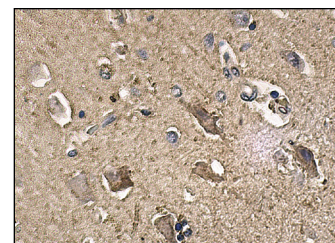
RESEARCH USE

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

DATA



TACE (H-300): sc-13973. Western blot analysis of TACE expression in NAMALWA (A) and K-562 (B) whole cell lysates.



TACE (H-300): sc-13973. Immunoperoxidase staining of formalin fixed, paraffin-embedded human brain tissue showing cytoplasmic staining of neuronal cells.

SELECT PRODUCT CITATIONS

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- Liu, W.H., et al. 2010. Suppression of ADAM17-mediated Lyn/Akt pathways induces apoptosis of human leukemia U937 cells: Bungarus multicinctus protease inhibitor-like protein-1 uncovers the cytotoxic mechanism. *J. Biol. Chem.* 285: 30506-30615.
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- Fragkouli, A., et al. 2011. Matrix metalloproteinase-9 participates in NGF-induced α -secretase cleavage of amyloid- β protein precursor in PC12 cells. *J. Alzheimers Dis.* 24: 705-719.
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