

TACE Antibody

TACE (CT): *TNF- α converting enzyme, ADAM17*

CATALOG NO.: 1131

BACKGROUND:

Tumor-necrosis factor- α is a proinflammatory cytokine and contributes to a variety of inflammatory disease responses and programmed cell death. TNF- α is synthesized as a 26K type II membrane-bound precursor that is cleaved by a convertase to generate secreted 17K mature TNF- α . TNF- α converting enzyme (TACE) protein was recently purified and the human and mouse TACE cDNAs were cloned by several groups separately (1-3). TACE is a membrane-bound metalloprotease-disintegrin in the family of mammalian ADAM (for a disintegrin and metalloprotease). TACE also processes other cell surface proteins, including TNF receptor, TGF α , the L-selectin adhesion molecule, and alpha-cleavage of amyloid protein precursor (APP) (4,5). TACE mRNA is expressed in a variety of human and murine tissues. TACE was selected as one of the few targets in cytokine activation by the Eighth International Conference of the Inflammation Research Association (6).

SOURCE:

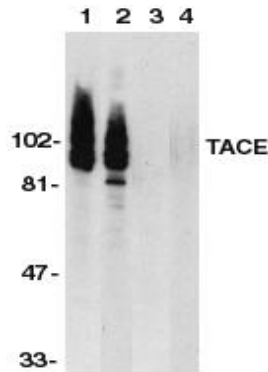
Rabbit polyclonal TACE antibody was raised against a peptide corresponding to amino acids near the carboxy terminus of human TACE. This sequence differs from those of mouse and rat TACE by one amino acid.

APPLICATION:

TACE antibody can be used for detection of TACE by Western blot at 0.5 – 1 μ g/ml. (Optimal dilution should be determined by user.) HeLa or Jurkat whole cell lysate can be used as positive control and 80 to 130 kDa bands can be detected, which may represent mature protein, precursor, and glycosylated TACE. TACE antibody is human, mouse, and rat reactive. **For research use only.**

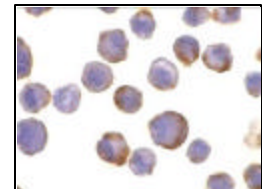
STORAGE:

TACE antibody is supplied as immunoaffinity chromatography purified IgG in PBS containing 0.02% sodium azide. Store at -20°C, stable for one year.



Western blot analysis of TACE in HeLa (1,3) and Jurkat (2,4) whole cell lysate in the absence (1,2) or presence (3,4) of blocking peptide with TACE antibody at 1 μ g/ml.

Immunocytochemistry of TACE in HeLa cells with TACE antibody at 10 μ g/ml.



RELATED PRODUCTS:

Blocking peptide, Catalog No. **1131P**.

HeLa Lysate, Catalog No. **1201**.

APP Antibody (CT), Catalog No. **2136**.

ADAM10 Antibody (CT), Catalog No. **2051**.

REFERENCES:

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 3. Mizui Y, Yamazaki K, Sagane K, et al. cDNA cloning of mouse tumor necrosis factor- α converting enzyme (TACE) and partial analysis of its promoter. *Gene* 1999; 233:67-74.
 4. Peschon JJ, Slack JL, Reddy P, et al. An essential role for ectodomain shedding in mammalian development. *Science* 1998; 282:1281-4.
 5. Buxbaum JD, Liu KN, Luo Y, et al. Evidence that tumor necrosis factor alpha converting enzyme is involved in regulated alpha-secretase cleavage of the Alzheimer amyloid protein precursor. *J. Biol. Chem.* 1998; 273:27765-7.
 6. Giegel DA, Chaplin DD. Targets in cytokine activation. *Agents Actions Suppl.* 1998; 49:1-3.
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