

TACE Antibody

Catalog # ASC10017

Specification

TACE Antibody - Product Information

Application
Primary Accession
Other Accession
Reactivity
Host
Clonality
Isotype

Calculated MW Application Notes P78536

NP_003174, 6868 Human, Mouse, Rat

Rabbit Polyclonal

IgG

Predicted: 93 kDa KDa

TACE antibody can be used for detection of TACE by Western blot at 0.5 μg/mL. For immunocytochemistry use 10 μg/mL. For immunofluorescence start at 10 μg/mL.

TACE Antibody - Additional Information

Gene ID 6868

Other Names

TACE Antibody: CSVP, TACE, NISBD, ADAM18, CD156B, CSVP, Disintegrin and metalloproteinase domain-containing protein 17, Snake venom-like protease, ADAM 17, ADAM metallopeptidase domain 17

Target/Specificity

TACE antibody was raised against a peptide corresponding to 17 amino acids near the carboxy terminus of human TACE.

The immunogen is located within the last 50 amino acids of TACE.

Reconstitution & Storage

TACE antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

Precautions

TACE Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

TACE Antibody - Protein Information

Name ADAM17

Synonyms CSVP, TACE

Function

Cleaves the membrane-bound precursor of TNF-alpha to its mature soluble form (PubMed:9034191). Responsible for



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the proteolytical release of soluble JAM3 from endothelial cells surface (PubMed:20592283). Responsible for the proteolytic release of several other cell-surface proteins, including p75 TNF-receptor, interleukin 1 receptor type II, p55 TNF-receptor, transforming growth factor-alpha, L-selectin, growth hormone receptor, MUC1 and the amyloid precursor protein (PubMed:12441351). Acts as an activator of Notch pathway by mediating cleavage of Notch, generating the membrane-associated intermediate fragment called Notch extracellular truncation (NEXT) (PubMed:24226769). Plays a role in the proteolytic processing of ACE2 (PubMed:24227843

href="http://www.uniprot.org/citations/24227843" target="_blank">24227843). Plays a role in hemostasis through shedding of GP1BA, the platelet glycoprotein Ib alpha chain (By similarity). Mediates the proteolytic cleavage of LAG3, leading to release the secreted form of LAG3 (By similarity). Mediates the proteolytic cleavage of IL6R, leading to the release of secreted form of IL6R (PubMed:<a href="http://www.uniprot.org/citations/26876177"

target="_blank">26876177, PubMed:28060820). Mediates the proteolytic cleavage and shedding of FCGR3A upon NK cell stimulation, a mechanism that allows for increased NK cell motility and detachment from opsonized target cells.

Cellular Location

Membrane; Single-pass type I membrane protein.

Tissue Location

Ubiquitously expressed. Expressed at highest levels in adult heart, placenta, skeletal muscle, pancreas, spleen, thymus, prostate, testes, ovary and small intestine, and in fetal brain, lung, liver and kidney. Expressed in natural killer cells (at protein level) (PubMed:24337742).

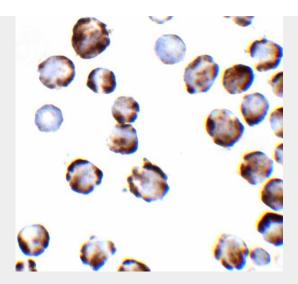
TACE Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

TACE Antibody - Images





Immunocystochemistry of TRPC6 in K562 cells with TRPC6 antibody at 2 μg/mL.

TACE Antibody - Background

TACE Antibody: Tumor-necrosis factor-alpha 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. 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, TGFalpha, the L-selectin adhesion molecule, and alpha-cleavage of amyloid protein precursor (APP). 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.

TACE Antibody - References

Black RA, Rauch CT , Kozlosky CJ, et al. A metalloproteinase disintegrin that releases tumour-necrosis factor- α from cells. Nature 1997;385:729-733

Moss ML, Jin SL, Milla ME, et al. Cloning of a disintegrin metalloproteinase that processes precursor tumour-necrosis factor- α . Nature 1997;385:733-736

Mizui Y, Yamazaki K, Sagane K, Tanaka I. cDNA cloning of mouse tumor necrosis factor- α converting enzyme (TACE) and partial analysis of its promoter. Gene 1999;233:67-74

Peschon JJ, Slack JL, Reddy P, et al. An essential role for ectodomain shedding in mammalian development. Science 1998;282:1281-4