

TACE Antibody

Purified Rabbit Polyclonal Antibody Catalog # ABV11515

Specification

TACE Antibody - Product Information

Application Primary Accession Reactivity Host Clonality Isotype Calculated MW WB <u>P78536</u> Human, Mouse, Rat Rabbit Polyclonal Rabbit IgG 93021

TACE Antibody - Additional Information

Gene ID 6868

Other Names TACE, CD156b, Disintegrin and metalloproteinase domain-containing protein 17; ADAM 17; TNF-alpha-converting enzyme; TNF-alpha convertase; Snake venom-like protease

Target/Specificity TACE/ADAM17

Formulation 100 μ g (0.5 mg/ml) peptide affinity purified rabbit anti-TACE polyclonal antibody in phosphate buffered saline (PBS), pH 7.2, containing 50% glycerol, 1% BSA, 0.02% thimerosal.

Handling

The antibody solution should be gently mixed before use.

Background Descriptions

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

TACE Antibody - Protein Information

Name ADAM17 (HGNC:195)

Synonyms CSVP, TACE

Function

Transmembrane metalloprotease which mediates the ectodomain shedding of a myriad of transmembrane proteins including adhesion proteins, growth factor precursors and cytokines important for inflammation and immunity (PubMed:<a



href="http://www.uniprot.org/citations/24226769" target="_blank">24226769, PubMed:24227843, PubMed:28060820, PubMed:28060820, PubMed:28923481, PubMed:28923481, PubMed:28923481, PubMed:28923481, PubMed:28923481). Cleaves the membrane-bound precursor of TNF-alpha to its mature soluble form (PubMed:<a

membrane-bound precursor of TNF-alpha to its mature soluble form (PubMed:36078095, PubMed:9034191). Responsible for 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). 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. Cleaves TREM2, resulting in shedding of the TREM2 ectodomain (PubMed:28923481).

Cellular Location

Cell 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.

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

TACE Antibody - Images

TACE Antibody - Background

Tumor necrosis factor- α (TNF- 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. TACE is a membrane-bond 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 , L-selectin adhesion molecule, and alpha-cleavage of amyloid protein precursor (APP). TACE mRNA is expressed in a variety of human and murine tissues.