

Anti-ADAM17 Antibody
Catalog # ABO11152**Specification**

Anti-ADAM17 Antibody - Product Information

| | |
|-------------------|------------------------|
| Application | WB |
| Primary Accession | P78536 |
| Host | Rabbit |
| Reactivity | Human, Mouse, Rat |
| Clonality | Polyclonal |
| Format | Lyophilized |

Description

Rabbit IgG polyclonal antibody for Disintegrin and metalloproteinase domain-containing protein 17(ADAM17) detection. Tested with WB in Human;Mouse;Rat.

Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-ADAM17 Antibody - Additional Information

Gene ID 6868

Other Names

Disintegrin and metalloproteinase domain-containing protein 17, ADAM 17, 3.4.24.86, Snake venom-like protease, TNF-alpha convertase, TNF-alpha-converting enzyme, CD156b, ADAM17, CSVP, TACE

Calculated MW

receptors KDa

Application Details

Western blot, 0.1-0.5 µg/ml, Human, Mouse, Rat

Subcellular Localization

and enzymes."

Tissue Specificity

sc 13973|sc 25782|sc 390859|sc 6416|sc 6417

Source

|neuroscience|neurology process|neurodegenerative disease|alzheimer's disease|
signal transduction|adapters|transmembrane|
stem cells|signaling pathways|notch|secreted|
cancer|invasion/microenvironment|ecm|extracellular matrix|adam protein family|
cell biology|proteolysis / ubiquitin|proteolytic enzymes|metalloprotease|adams|cancer metabolism|response to hypoxia|
metabolism|pathways and processes|metabolism processes|types of disease

Protein Name

Disintegrin and metalloproteinase domain-containing protein 17;ADAM 17;3.4.24.86;Snake

venom-like protease;TNF-alpha convertase;TNF-alpha-converting enzyme;CD156b;ADAM17;CSVP, TACE;

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg Thimerosal, 0.05mg NaN₃.

Immunogen

A synthetic peptide corresponding to a sequence at the C-terminus of human ADAM17(806-824aa AASFKLQRQNRVDSKETEC), different from the related rat and mouse sequences by one amino acid.

Purification

Immunogen affinity purified.

Cross Reactivity

No cross reactivity with other proteins

Storage

At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

Sequence Similarities

93021 MW

Anti-ADAM17 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:[24226769](http://www.uniprot.org/citations/24226769), PubMed:[24227843](http://www.uniprot.org/citations/24227843), PubMed:[28060820](http://www.uniprot.org/citations/28060820), PubMed:[28923481](http://www.uniprot.org/citations/28923481)). Cleaves the membrane-bound precursor of TNF to its mature soluble form (PubMed:[36078095](http://www.uniprot.org/citations/36078095), PubMed:[9034191](http://www.uniprot.org/citations/9034191)). Responsible for the proteolytical release of soluble JAM3 from endothelial cells surface (PubMed:[20592283](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/24226769)). Plays a role in the proteolytic processing of ACE2 (PubMed:[24227843](http://www.uniprot.org/citations/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: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).

Anti-ADAM17 Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-ADAM17 Antibody - Images



Anti-ADAM17 antibody, ABO11152, Western blotting
Lane 1: Human Placenta Tissue Lysate
Lane 2: HELA Cell Lysate
Lane 3: PANC Cell Lysate
Lane 4: 293T Cell Lysate

Anti-ADAM17 Antibody - Background

ADAM17(ADAM metalloproteinase domain 17), also called TACE (tumor necrosis factor- α -converting enzyme), is a 70-kDa enzyme that belongs to the ADAM protein family of disintegrins and metalloproteases. Expression studies showed that the encoded protein

cleaves precursor tumor necrosis factor-alpha to its mature form. Northern blot analysis revealed that the gene was expressed as a 5-kb mRNA in all tissues examined. ADAM17 is understood to be involved in the processing of tumor necrosis factor alpha(TNF-alpha) at the surface of the cell, and from within the intracellular membranes of the trans-Golgi network. This process, which is also known as shedding"