

#### ADAM17 / TACE Antibody (C-Terminus) Goat Polyclonal Antibody Catalog # ALS13412

### Specification

# ADAM17 / TACE Antibody (C-Terminus) - Product Information

Application Primary Accession Reactivity Host Clonality Calculated MW Dilution WB, IHC-P, E <u>P78536</u> Human, Monkey, Chicken, Bovine Goat Polyclonal 93kDa KDa WB~~1:1000 IHC-P~~N/A E~~N/A

### ADAM17 / TACE Antibody (C-Terminus) - 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

Target/Specificity

Human ADAM17. This antibody is expected to recognise isoform 1 (represented by NP\_003174) and not isoform 2 (represented by NP\_068604).

**Reconstitution & Storage** 

Store at -20°C. Minimize freezing and thawing.

**Precautions** ADAM17 / TACE Antibody (C-Terminus) is for research use only and not for use in diagnostic or therapeutic procedures.

# ADAM17 / TACE Antibody (C-Terminus) - Protein Information

Name ADAM17 (<u>HGNC:195</u>)

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</a>, PubMed:<a href="http://www.uniprot.org/citations/24227843" target="\_blank">24227843</a>, PubMed:<a



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

href="http://www.uniprot.org/citations/36078095" target="\_blank">36078095</a>, PubMed:<a href="http://www.uniprot.org/citations/9034191" target="\_blank">9034191</a>). Responsible for the proteolytical release of soluble JAM3 from endothelial cells surface (PubMed:<a

href="http://www.uniprot.org/citations/20592283" target="\_blank">20592283</a>). 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:<a

href="http://www.uniprot.org/citations/12441351" target="\_blank">12441351</a>). Acts as an activator of Notch pathway by mediating cleavage of Notch, generating the membrane-associated intermediate fragment called Notch extracellular truncation (NEXT) (PubMed:<a

href="http://www.uniprot.org/citations/24226769" target="\_blank">24226769</a>). Plays a role in the proteolytic processing of ACE2 (PubMed:<a

href="http://www.uniprot.org/citations/24227843" target="\_blank">24227843</a>). 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</a>, PubMed:<a href="http://www.uniprot.org/citations/28060820" target="\_blank">28060820</a>). 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:<a href="http://www.uniprot.org/citations/28923481" target="\_blank">28923481</a>).

**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).

# ADAM17 / TACE Antibody (C-Terminus) - Protocols

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

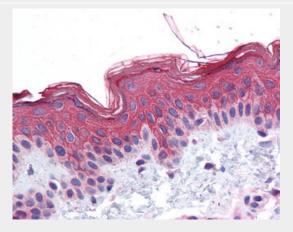
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

ADAM17 / TACE Antibody (C-Terminus) - Images





HeLa lysate (RIPA buffer, 35 ug total protein per lane).



Anti-ADAM17 antibody IHC of human skin.

# ADAM17 / TACE Antibody (C-Terminus) - Background

Cleaves the membrane-bound precursor of TNF-alpha to its mature soluble form. Responsible for the proteolytical release of soluble JAM3 from endothelial cells surface. 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. Acts as an activator of Notch pathway by mediating cleavage of Notch, generating the membrane-associated intermediate fragment called Notch extracellular truncation (NEXT). Plays a role in the proteolytic processing of ACE2.

# ADAM17 / TACE Antibody (C-Terminus) - References

Moss M.L.,et al.Nature 385:733-736(1997). Black R.A.,et al.Nature 385:729-733(1997). Patel I.R.,et al.J. Immunol. 160:4570-4579(1998). Diaz-Rodriguez E.,et al.Mol. Biol. Cell 13:2031-2044(2002). Thathiah A.,et al.J. Biol. Chem. 278:3386-3394(2003).