10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Goat Anti-ADAM17 / TACE Antibody
Peptide-affinity purified goat antibody
Catalog # AF1026a

Specification

Goat Anti-ADAM17 / TACE Antibody - Product Information

Application	**WB, Pep-ELISA**
Primary Accession	P78536
Other Accession	NP_003174, 6868, 11491 (mouse)
Reactivity	**Human**
Predicted	**Mouse, Rat**
Host	**Goat**
Clonality	**Polyclonal**
Concentration	**100ug/200ul**
Isotype	**IgG**
Calculated MW	**93021**

Goat Anti-ADAM17 / TACE 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

Dilution
WB~~1:1000
Pep-ELISA~~N/A

Format
0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
Goat Anti-ADAM17 / TACE Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-ADAM17 / 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:24226769, PubMed:24227843, PubMed:28060820, PubMed:28923481). Cleaves the 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: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).

Goat Anti-ADAM17 / TACE 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 Cytomety
- Cell Culture

Goat Anti-ADAM17 / TACE Antibody - Images

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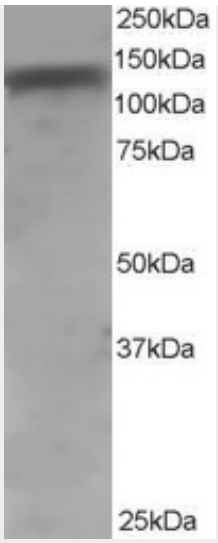
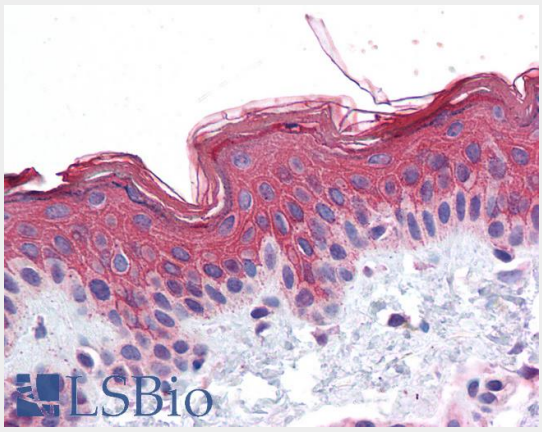


EB05382 staining (0.2µg/ml) of Human HeLa lysate (RIPA buffer, 35µg total protein per lane). Detected by chemiluminescence.



EB05382 (3.75µg/ml) staining of paraffin embedded Human Skin. Steamed antigen retrieval with citrate buffer pH 6, AP-staining. **This data is from a previous batch, not on sale.**

Goat Anti-ADAM17 / TACE Antibody - Background

This gene encodes a member of the ADAM (a disintegrin and metalloprotease domain) family. Members of this family are membrane-anchored proteins structurally related to snake venom disintegrins, and have been implicated in a variety of biologic processes involving cell-cell and cell-matrix interactions, including fertilization, muscle development, and neurogenesis. The protein encoded by this gene functions as a tumor necrosis factor-alpha converting enzyme; binds mitotic arrest deficient 2 protein; and also plays a prominent role in the activation of the Notch signaling pathway.

Goat Anti-ADAM17 / TACE Antibody - References

Maternal genes and facial clefts in offspring: a comprehensive search for genetic associations in two population-based cleft studies from Scandinavia. Jugessur A, et al. PLoS One, 2010 Jul 9. PMID 20634891.
Variation at the NFATC2 Locus Increases the Risk of Thiazolinedinedione-Induced Edema in the Diabetes REduction Assessment with ramipril and rosiglitazone Medication (DREAM) Study. Bailey SD, et al. Diabetes Care, 2010 Jul 13. PMID 20628086.
The relationship between ADAM17 promoter polymorphisms and sporadic Alzheimer's disease in a Northern Chinese Han population. Wang M, et al. J Clin Neurosci, 2010 Oct. PMID 20627730.

ADAM17 regulates epidermal growth factor receptor expression through the activation of Notch1 in non-small cell lung cancer. Baumgart A, et al. Cancer Res, 2010 Jul 1. PMID 20551051.
Personalized smoking cessation: interactions between nicotine dose, dependence and quit-success genotype score. Rose JE, et al. Mol Med, 2010 Jul-Aug. PMID 20379614.