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Anti-ADAM17 Antibody

Catalog # ABO11152

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.

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	93021
Application Details	Western blot, 0.1-0.5 □g/ml, Human, Mouse, Rat
Subcellular Localization	and enzymes."
Tissue Specificity	sc 13973|sc 25782|sc 390859|sc 6416|sc 6417
Source	Eukaryota
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 r˚Constitution, 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

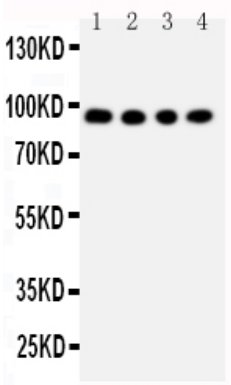
Protein Information

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 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).

Background

ADAM17(ADAM metallopeptidase domain 17), also called TACE (tumor necrosis factor-alpha-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 theintracellular membranes of the trans-Golgi network. This process, which is also known as shedding"

Images



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