

ADAM17 Rabbit mAb

Catalog # AP76958

Product Information

Application WB, IF, FC, ICC, IP

Primary Accession P78536

Reactivity Rat, Human, Mouse

Host Rabbit

Clonality Monoclonal Antibody

Isotype IgG

Conjugate Unconjugated

Immunogen A synthesized peptide derived from human ADAM17

Purification Affinity Chromatography

Calculated MW 93021

Additional Information

Gene ID 6868

Other Names ADAM17

Dilution WB~~1/500-1/1000 IF~~1:50~200 FC~~1:10~50 ICC~~N/A IP~~N/A

Format Liquid in 10mM PBS, pH 7.4, 150mM sodium chloride, 0.05% BSA, 0.02%

sodium azide and 50% glycerol.

Storage Store at 4°C short term. Aliquot and store at -20°C long term. Avoid

freeze/thaw cycles.

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:<u>28923481</u>). Cleaves the membrane-bound precursor of TNF-alpha to its mature soluble form (PubMed:<u>36078095</u>, PubMed:<u>9034191</u>). Responsible for the proteolytical release of soluble JAM3 from endothelial cells surface (PubMed:<u>20592283</u>). 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).

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