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ADAM17 Antibody

Rabbit mAb
Catalog # AP91129

Product Information

Application	WB, IF, FC, ICC, IP
Primary Accession	P78536
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Other Names	CD156b; ADAM17; CSVP; TACE;
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	93021

Additional Information

Dilution	WB 1:500~1:2000 ICC/IF 1:50~1:200 IP 1:50 FC 1:100
Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human ADAM17
Description	TACE is responsible for the shedding of EGFR ligands such as amphiregulin and TNF-α. Some tumors have hyperactivated EGFR due to upregulated TNF-α production and upregulated TACE, making TACE a potential target for drug development. TACE activates Notch in a ligand-independent manner and has been shown to play a role in the development of the Drosophila nervous system.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

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).

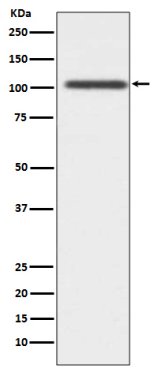
Cellular Location

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).

Images



Western blot analysis of ADAM17 expression in Hela cell lysate.

Image not found : 202311/AP91129-IF.jpg

Immunofluorescent analysis of Hela cells, using ADAM17 Antibody.