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Anti-ADAM17 Reference Antibody (MEDI3622)

Catalog # APR11489

Product Information

Application	Functional assay, Kinetics (SPR), Kinetics (BLI), FACS, E, FTA
Primary Accession	P78536
Reactivity	Human
Clonality	Monoclonal
Isotype	IgG1-REM
Calculated MW	93021

Additional Information

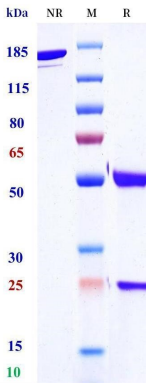
Target/Specificity	ADAM17
Expression system	CHO

Protein Information

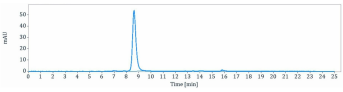
Name	ADAM17 (HGNC:195)
Synonyms	CSVP, TACE
Function	Transmembrane metalloprotease which mediates the ectodomain shedding of a myriad of transmembrane proteins including adhesion proteins, growth factor precursors and cytokines important for inflammation and immunity (PubMed:24226769, PubMed:24227843, PubMed:28060820, PubMed:28923481, PubMed:38771644). 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, PubMed:38771644). 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). Expressed in the hair cortex, and in the inner root sheath and outer root sheath of hair follicle (PubMed:38771644)

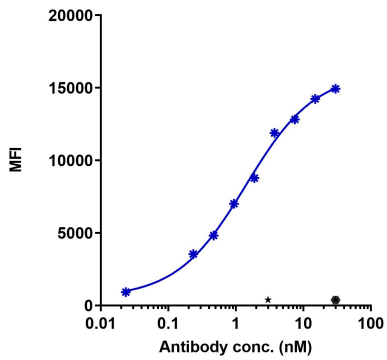
Images



Anti-ADAM17 Reference Antibody (MEDI3622) on SDS-PAGE under reducing (R) condition. The purity of the protein is greater than 95%.



The purity of Anti-ADAM17 Reference Antibody (MEDI3622) is 97.48%, determined by SEC-HPLC.



PLVX-puro-ADAM17-FL cell line were stained with MEDI3622 and negative control protein respectively, washed and then followed by PE and analyzed with FACS, with the EC50 is 1.411 nM.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.