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ADAM17 Antibody (C-term) Blocking Peptide

Synthetic peptide
Catalog # BP1492b

Specification

ADAM17 Antibody (C-term) Blocking Peptide - Product Information

Primary Accession P78536

ADAM17 Antibody (C-term) Blocking Peptide - Additional Information

Gene ID 6868

Other Names
Disintegrin and metalloproteinase domain-containing protein 17, ADAM 17, Snake venom-like protease, TNF-alpha convertase, TNF-alpha-converting enzyme, CD156b, ADAM17, CSVP, TACE

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP1492b was selected from the C-term region of human ADAM17. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

ADAM17 Antibody (C-term) Blocking Peptide - Protein Information

Name ADAM17

Synonyms CSVP, TACE

Function
Cleaves the membrane-bound precursor of TNF-alpha to its mature soluble form (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.

Cellular Location
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).

ADAM17 Antibody (C-term) Blocking Peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Blocking Peptides

ADAM17 Antibody (C-term) Blocking Peptide - Images

ADAM17 Antibody (C-term) Blocking Peptide - Background

ADAM17 is 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. ADAM17 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.

ADAM17 Antibody (C-term) Blocking Peptide - References

Tellier,E., J. Cell. Physiol. 214 (3), 687-693 (2008)Takamune,Y., Biochem. Biophys. Res. Commun. 365 (2), 393-398 (2008)