



Cleaved-TACE (R215) Polyclonal Antibody

Catalog No	YP-Ab-02299
Isotype	IgG
Reactivity	Human;Rat;Mouse;
Applications	WB;ELISA
Gene Name	ADAM17
Protein Name	Disintegrin and metalloproteinase domain-containing protein 17
Immunogen	The antiserum was produced against synthesized peptide derived from human ADAM 17. AA range:196-245
Specificity	Cleaved-TACE (R215) Polyclonal Antibody detects endogenous levels of fragment of activated TACE protein resulting from cleavage adjacent to R215.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	Western Blot: 1/500 - 1/2000. ELISA: 1/20000. Not yet tested in other applications.
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	ADAM17; CSVP; TACE; Disintegrin and metalloproteinase domain-containing protein 17; ADAM 17; Snake venom-like protease; TNF-alpha convertase; TNF-alpha-converting enzyme; CD antigen CD156b
Observed Band	65kD
Cell Pathway	Membrane; Single-pass type I membrane protein.
Tissue Specificity	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).
Function	catalytic activity:Narrow endopeptidase specificity. Cleaves Pro-Leu-Ala-Gln-Ala- -Val-Arg-Ser-Ser-Ser in the membrane-bound, 26-kDa form of tumor necrosis factor alpha (TNF-alpha). Similarly cleaves other membrane-anchored, cell-surface proteins to 'shed' the extracellular domains.,cofactor: Binds 1 zinc ion per subunit.,domain: Must be membrane anchored to cleave the different substrates. The cytoplasmic domain is not required for the this activity. Only the catalytic domain is essential to shed TNF and p75 TNFR.,domain: The conserved cysteine present in the cysteine-switch motif binds the catalytic zinc ion, thus inhibiting the enzyme. The dissociation of the cysteine from the zinc ion upon the activation-peptide release activates the



enzyme.,function:Cleaves the membrane-bound precursor of TNF-alpha to its mature soluble form. Responsible for the proteolytic release of several other cel

Background

ADAM metalloproteinase domain 17(ADAM17) Homo sapiens This gene encodes 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. The encoded preproprotein is proteolytically processed to generate the mature protease. The encoded protease functions in the ectodomain shedding of tumor necrosis factor-alpha, in which soluble tumor necrosis factor-alpha is released from the membrane-bound precursor. This protease also functions in the processing of numerous other substrates, including cell adhesion proteins, cytokine and growth factor receptors and epidermal growth factor (EGF) receptor ligands. The encoded protein also plays a prominent role in the activation o

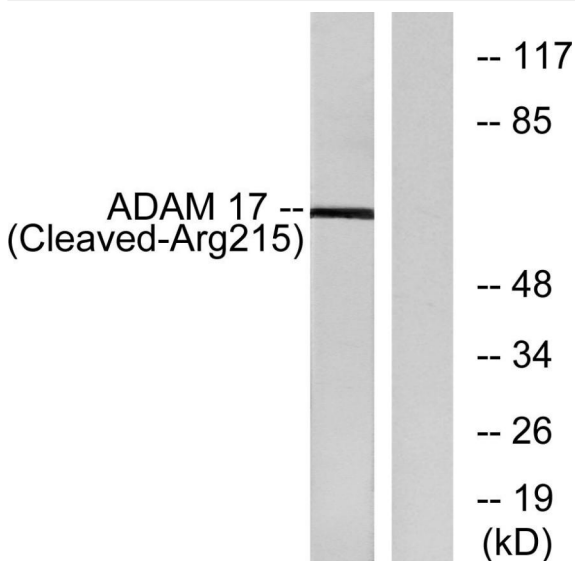
matters needing attention

Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images



Western blot analysis of lysates from rat liver cells, using ADAM 17 (Cleaved-Arg215) Antibody. The lane on the right is blocked with the synthesized peptide.