



ADAM10 Monoclonal Antibody

Catalog No	YP-mAb-02277
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB
Gene Name	ADAM10
Immunogen	Synthesized peptide derived from ADAM10 . at AA range: 170-250
Specificity	ADAM10 Monoclonal Antibody detects endogenous levels of ADAM10 protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Monoclonal, Mouse,IgG
Purification	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-1:2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	ADAM 10;Disintegrin and metalloproteinase domain-containing protein 10; EC:3.4.24.81;KUZ;MADM;ADAM10;CDw156;Kuzbanian protein homolog; Mammalian disintegrin-metalloprotease;CD antigen CD156c
Observed Band	85kD
Calculated Molecular Weight	85kD
Cell Pathway	Cell membrane ; Single-pass type I membrane protein . Golgi apparatus membrane ; Single-pass type I membrane protein . Cytoplasmic vesicle, clathrin-coated vesicle . Cell projection, axon . Cell projection, dendrite . Cell junction, adherens junction . Cytoplasm . Is localized in the plasma membrane but is also expressed in the Golgi apparatus and in clathrin-coated vesicles derived likely from the Golgi (PubMed:12475894). During long term depression, it is recruited to the cell membrane by DLG1 (PubMed:23676497). The immature form is mainly located near cytoplasmic fibrillar structures, while the mature form is predominantly located at zonula adherens and the cell membrane (PubMed:30463011). The localization and clustering of mature ADAM10 to zonula adherens is regulated by AFDN, TSPAN33,
Tissue Specificity	Expressed in the brain (at protein level) (PubMed:23676497). Expressed in spleen, lymph node, thymus, peripheral blood leukocyte, bone marrow, cartilage, chondrocytes and fetal liver (PubMed:11511685, PubMed:9016778).



Function

catalytic activity:Endopeptidase of broad specificity.,cofactor:Binds 1 zinc ion., 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 at '76-Ala-|-Val-77' to its mature soluble form. Responsible for the proteolytic release of several other cell-surface proteins, including heparin-binding epidermal growth-like factor, ephrin-A2 and for constitutive and regulated alpha-secretase cleavage of amyloid precursor protein (APP). Contributes to the normal cleavage of the cellular prion protein. Involved in the cleavage of the adhesion molecule L1 at the cell surface and in released membrane vesicles, suggesting a vesicle-based protease activity. Controls also

Background

ADAM metallopeptidase domain 10(ADAM10) Homo sapiens Members of the ADAM family are cell surface proteins with a unique structure possessing both potential adhesion and protease domains. This gene encodes an ADAM family member that cleaves many proteins including TNF-alpha and E-cadherin. Alternate splicing results in multiple transcript variants encoding different proteins that may undergo similar processing. [provided by RefSeq, Feb 2016],

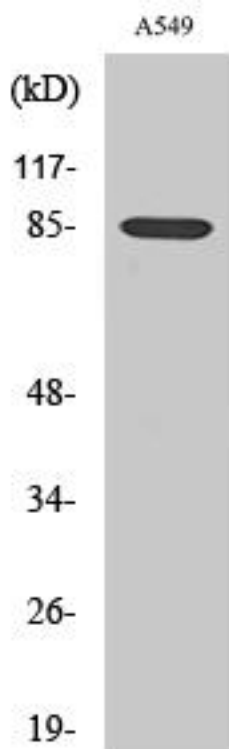
matters needing attention

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 various cells using ADAM10 Monoclonal Antibody