Recombinant ADAM12 Monoclonal Antibody

catalog number: AN300106P

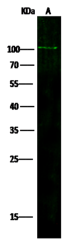
Note: *Centrifuge before opening to ensure complete recovery of vial contents.*

Description

Reactivity	Human
Immunogen	Recombinant Human ADAM12 protein
Host	Rabbit
Isotype	IgG
Clone	11G10
Purification	Protein A
Buffer	0.2 μm filtered solution in PBS

Applications	Recommended Dilution
WB	1:500-1:1000

Data



Western Blot with ADAM12 Monoclonal Antibody at dilution of 1:500. Lane A: A431 Whole Cell Lysate, Lysates/proteins at 30 μg per lane.

Observed-MW:100 kDa

Calculated-MW:100 kDa

Preparation & Storage

Storage	This antibody can be stored at 2℃-8℃ for one month without detectable loss of activity. Antibody products are stable for twelve months from date of receipt when stored at -20℃ to -80℃. Preservative-Free. Avoid repeated freeze-thaw cycles.
Shipping	Ice bag

Background

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The ADAMs (a disintegrin and metalloprotease) comprise a family of multidomain proteins with metalloprotease, cell adhesion, and signaling activities. Human ADAM12, which is implicated in diseases such as cancer, is expressed in two splice forms, the transmembrane ADAM12-L and the shorter and soluble ADAM12-S. ADAM12, also known as and Meltrin alpha, is a member of the ADAM protein family, which contains one disintegrin domain, one EGF-like domain and one peptidase M12B domain. ADAM12 is synthesized as a zymogen with the prodomain keeping the metalloprotease inactive through a cysteine-switch mechanism. Maturation and activation of the protease involves the cleavage of the prodomain in the trans-Golgi or possibly at the cell surface by a furin-peptidase. It is a membrane-anchored metalloprotease, which has been implicated in activation-inactivation of growth factors that play an important role in wound healing, including heparin-binding epidermal growth factor (EGF)-like growth factor (HB-EGF) and IGF binding proteins. ADAM12 may also regulate cell-cell and cell-extracellular matrix contacts through interactions with cell surface receptors - integrins and syndecans - potentially influencing the actin cytoskeleton. Moreover, ADAM12 interacts with several cytoplasmic signaling and adaptor molecules through its intracellular domain, thereby directly transmitting signals to or from the cell interior. These ADAM12-mediated cellular effects appear to be critical events in both biological and pathological processes. In addition to protease activity, ADAM12 possesses cell binding and cell signaling properties. In many studies, ADAM12 overexpression has been correlated with disease, and ADAM12 has been shown to promote tumor growth and progression in cancer. On the other hand, protective effects of ADAM12 in disease have also been reported.