abcam

ab39155

Anti-ADAM12 antibody - Aminoterminal end

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.4 Preservative: 0.05% Sodium azide Constituents: PBS, 50% Glycerol (glycerin, glycerine), 2.9% Sodium chloride
Form	Liquid
Clonality	Polyclonal
Immunogen	Synthetic Peptide within Human ADAM12. The exact immunogen used to generate this antibody is proprietary information. Database link O43184
Purification technique	Affinity purification Immunogen
Specificity	This antibody recognizes latent unprocessed and processed forms of ADAM12, but does not react with other ADAMs.
Concentration	1 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →
Purification notes	The antibody has been peptide affinity purified.

Reactivity data

Flow Cyt

Expected

Species	Mouse
Dilution info	-

Notes	ab171870 - Rabbit polyclonal IgG, is suitable for use as an isotype control with this antibody.

Species	Rat
Dilution info	-
Notes	ab171870 - Rabbit polyclonal IgG, is suitable for use as an isotype control with this antibody.

Species	Pig
Dilution info	-
Notes	ab171870 - Rabbit polyclonal IgG, is suitable for use as an isotype control with this antibody.

Species	Human
Dilution info	-
Notes	ab171870 - Rabbit polyclonal IgG, is suitable for use as an isotype control with this antibody.

WB

Tested

Species	Human
Dilution info	1/1000 - 1/5000
Notes	A recommended starting concentration for Western blots is 1/1000 when using colorimetric substrates such as BCIP/NBT and 1/5000 for chemiluminescent substrates. EDTA/EGTA treatment of tissues or lysates is required to see latent zymogen.

Predicted

Species	Rat, Mouse, Pig
Dilution info	-
Notes	-

ICC/IF

Expected

Species	Mouse, Rat, Pig, Human
Dilution info	Use at an assay dependent concentration.
Notes	-

IHC-Fr

Expected

Species	Mouse, Rat, Pig, Human
Dilution info	Use at an assay dependent concentration.
Notes	-

Target data

See full target information ADAM12

Function	Involved in skeletal muscle regeneration, specifically at the onset of cell fusion. Also involved in macrophage-derived giant cells (MGC) and osteoclast formation from mononuclear precursors (By similarity).

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage duration	1-2 weeks
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	ADAM12 also known as meltrin-alpha is a member of the ADAM (a disintegrin and metalloproteinase) family and has a mass of approximately 110 kDa. It functions primarily in the modulation of cell-cell and cell-matrix interactions due to its

	metalloprotease and disintegrin domains. ADAM12 protein is expressed in various tissues including muscle and placenta. Although found in many cell types it is particularly abundant during embryogenesis and development reflecting its role in these processes.
Biological function summary	The ADAM12 protein holds a role in cell signaling migration and proliferation. It is often part of complexes that interact with other extracellular matrix components influencing cell adhesion and motility. Through its protease activity ADAM12 facilitates growth factor signaling by cleaving membrane-bound precursor proteins to release active growth factors. This activity plays an important role in tissue remodeling and repair.
Pathways	The ADAM12 protein is key in the EGFR signaling pathway where it modulates the availability of epidermal growth factor (EGF) by shedding EGF-like ligands from the cell surface. This action connects ADAM12 with proteins such as ERBB receptors influencing cell division and growth. Another significant pathway is the TGF-beta signaling pathway where ADAM12's interaction with latent TGF-beta complexes can impact the bioavailability of this cytokine therefore relating to proliferation and differentiation of cells.
Associated diseases and disorders	ADAM12 is linked to cancer progression and metastasis as its activity can positively influence tumor cell invasiveness and growth. Elevated levels of ADAM12 are observed in certain cancer types including breast and prostate cancer. Additionally it associates with metabolic disorders such as obesity where ADAM12 impacts adipogenesis and insulin sensitivity. In cancer ADAM12 interacts with proteins like matrix metalloproteinases (MMPs) to remodel the tumor microenvironment promoting cancer cell invasion.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

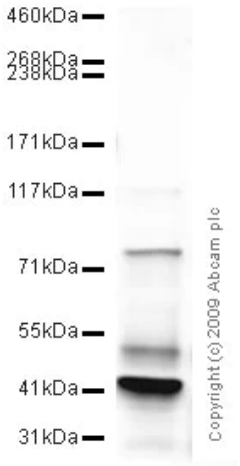
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

1 product image



Western blot - Anti-ADAM12 antibody - Aminoterminal end (ab39155)

All lanes:
Western blot - Anti-ADAM12 antibody - Aminoterminal end (ab39155) at 1/1000 dilution

All lanes:
Human heart tissue lysate - total protein (ab29431) at 10 µg

Secondary

All lanes:
Goat polyclonal to Rabbit IgG - H&L - Pre-Adsorbed (HRP) (ab65484) at 1/3000 dilution

Predicted band size: 100 kDa

Observed band size: 117 kDa, 42 kDa, 50 kDa, 84 kDa

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