For Research Use Only

# ADAM12 Polyclonal antibody

Catalog Number:14139-1-AP Featured Product 42 Publications

proteintech®
Antibodies | ELISA kits | Proteins
www.ptglab.com

## Basic Information

Catalog Number:
14139-1-AP

Size:
150ul , Concentration: 600 ug/ml by Nanodrop;

Source:
Rabbit

Isotype:
IgG

Immunogen Catalog Number:
AG5206

GenBank Accession Number:
BC060804

GeneID (NCBI):
8038

UNIPROT ID:
O43184

Full Name:
ADAM metallopeptidase domain 12

Calculated MW:
100 kDa

Observed MW:
90-100 kDa, 70-80 kDa

Purification Method:
Antigen affinity purification

Recommended Dilutions:
WB 1:500-1:2000
IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate
IHC 1:50-1:500
IF/ICC 1:200-1:800

## Applications

Tested Applications:
WB, IHC, IF/ICC, FC (Intra), IP, ELISA

Cited Applications:
WB, IHC, IF, IP

Species Specificity:
human, mouse, rat

Cited Species:
human, mouse, rat

***Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0***

Positive Controls:

WB : mouse brain tissue, HeLa cells, mouse heart tissue, rat brain tissue, MCF-7 cells

IP : HeLa cells,

IHC : human placenta tissue, human breast cancer tissue

IF/ICC : HepG2 cells,

## Background Information

ADAM12, also named as MLTN and Meltrin-alpha, is involved in skeletal muscle regeneration, specifically at the onset of cell fusion. It is also involved in macrophage-derived giant cells (MGC) and osteoclast formation from mononuclear precursors. ADAM12 is expressed in human malignant tumors(PMID:17355265). ADAM12's ability to degrade extracellular matrix components likely allows it to detach cancer cells from the basement membrane and assist them on their route to metastasis. But the protein's role not just as a biomarker of breast cancer but as a gateway to cancer cell migration is only now being understood. ADAM12 has 2 isoforms with the calculated molecular mass of 100 and 80 kDa, and this antibody can recognize all isoforms of ADAM12. ADAM12 has 4 forms: 120kDa full-length form, 90kd mature (processed form that lack the prodomain), 50-68kDa degradation product and 27kDa prodomain.

## Notable Publications

| Author | Pubmed ID | Journal | Application |
|---|---|---|---|
| Michal Sobecki | 36113462 | Cell Stem Cell | IF |
| Zhuo Zhang | 33030286 | FEBS Open Bio | WB |
| Michelle Van Sinderen | 26616664 | Reprod Fertil Dev | |

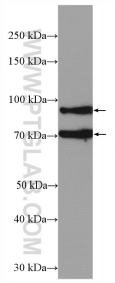
## Storage

Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

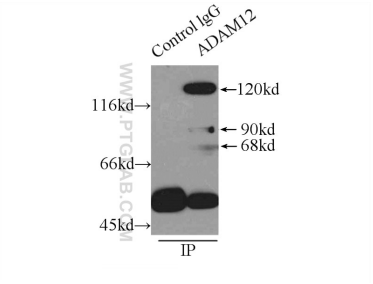
***** 20ul sizes contain 0.1% BSA**

For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

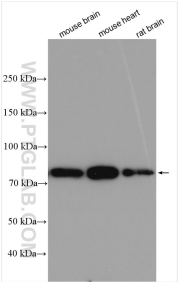
## Selected Validation Data



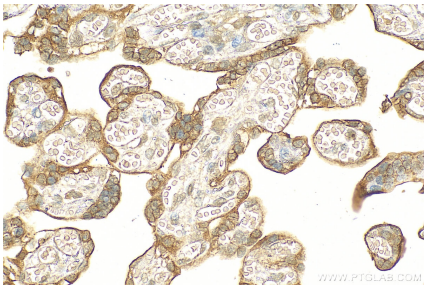

mouse brain tissue were subjected to SDS PAGE followed by western blot with 14139-1-AP (ADAM12 antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



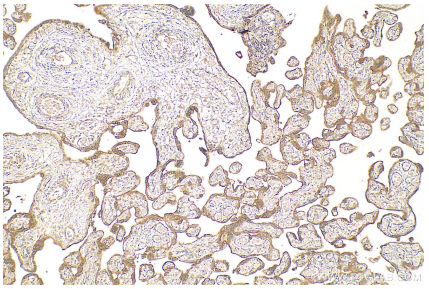

IP result of anti-ADAM12 (IP:14139-1-AP, 4ug; Detection:14139-1-AP 1:300) with HeLa cells lysate 4650ug.



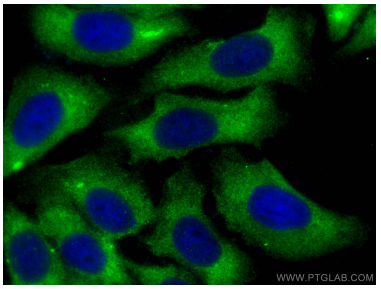

Various lysates were subjected to SDS PAGE followed by western blot with 14139-1-AP (ADAM12 antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



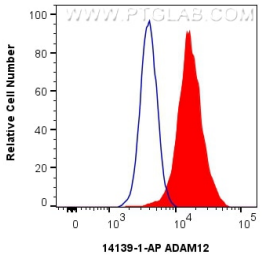

Immunohistochemical analysis of paraffin-embedded human placenta tissue slide using 14139-1-AP (ADAM12 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).




Immunohistochemical analysis of paraffin-embedded human placenta tissue slide using 14139-1-AP (ADAM12 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).




Immunofluorescent analysis of (-20°C Ethanol) fixed HepG2 cells using ADAM12 antibody (14139-1-AP) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).




1x10^6 HeLa cells were intracellularly stained with 0.25 ug ADAM12 Polyclonal antibody (14139-1-AP) and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2)(red), or 0.25 ug Rabbit IgG control Rabbit PolyAb (30000-0-AP) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).