ADAM12
Polyclonal ANTIBODY
Catalog Number: 14139-1-AP

Basic Information
Catalog Number: 14139-1-AP
Size: 39 μg/150 μl
Source: Rabbit
Isotype: IgG
Purification Method: Antigen affinity purification
Immunogen Catalog Number: AG5206

GenBank Accession Number: BC085954
GeneID (NCBI): 8038
Full Name: ADAM metallopeptidase domain 12
Calculated MW: 100 kDa
Observed MW: 97 kDa, 68 kDa

Recommended Dilutions:
WB: 1:500-1:3000
IP: 0.5-4.0 μg for IP and 1:200-1:1000 for WB
IHC: 1:300-1:500
IF: 1:10-1:100

Applications
Tested Applications: IF, IHC, IP, WB, ELISA
Cited Applications: FC, IF, IHC, IP, WB
Species Specificity: human, mouse
Cited Species: human, mouse, rat

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. It is involved in the regulation of growth factor activities and integrin functions, leading to promotion of cell growth and invasion, although the precise mechanisms of these are not clear at the present time. (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 beginning to be understood. This antibody can recognize all isoforms of ADAM12. ADAM12 has 4 forms: 120kd full-length form, 90kd mature (processed form that lack the prodomain); 50-68kd degradation product and 27kd prodomain.

Notable Publications
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<tr>
<th>Author</th>
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<tr>
<td>Michelle Van Sinderen</td>
<td>26916664</td>
<td>Reprod Fertil Dev</td>
<td>WB, IHC, IF</td>
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<tr>
<td>Junwen Wang</td>
<td>29139943</td>
<td>Biomed Pharmacother</td>
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<tr>
<td>Frithich Camilla C</td>
<td>21875931</td>
<td>Mol Cancer Res</td>
<td>WB, IHC</td>
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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

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 (312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.
Selected Validation Data

Mouse brain tissue were subjected to SDS PAGE followed by western blot with 14139-1-AP (ADAM12 antibody) at dilution of 1:300 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 cell lysate 4650ug.

Immunohistochemical of paraffin-embedded human breast cancer using 14139-1-AP (ADAM12 antibody) at dilution of 1:50 (under 10x lens).

Immunohistochemical of paraffin-embedded human breast cancer using 14139-1-AP (ADAM12 antibody) at dilution of 1:50 (under 40x lens).

Immunofluorescent analysis of HepG2 cells, using ADAM12 antibody 14139-1-AP at 1:25 and Rhodamine-labeled goat anti-rabbit IgG (red).