

For Research Use Only

# PAM Recombinant monoclonal antibody

Catalog Number: 87921-1-RR



## Basic Information

**Catalog Number:**

87921-1-RR

**Source:**

Rabbit

**Isotype:**

IgG

**Immunogen Catalog Number:**

EG5194

**GenBank Accession Number:**

NM\_001177306.2

**GeneID (NCBI):**

5066

**UNIPROT ID:**

P19021-1

**Full Name:**

peptidylglycine alpha-amidating  
monooxygenase

**Calculated MW:**

108 kDa

**Observed MW:**

75 kDa and 105-120 kDa

**Purification Method:**

Protein A purification

**CloneNo.:**

260074A10

**Recommended Dilutions:**

WB: 1:2000-1:10000

IP: 0.5-4.0 ug for 1.0-3.0 mg of total  
protein lysate

IF/ICC: 1:200-1:800

## Applications

**Tested Applications:**

WB, IF/ICC, IP, ELISA

**Species Specificity:**

human

**Positive Controls:**

WB : HeLa cells, U-251 cells, RD cells, U2OS cells, SK-N-SH cells

IP : U2OS cells,

IF/ICC : U2OS cells,

## Background Information

Peptidyl-glycine alpha-amidating monooxygenase (PAM) is a bifunctional type I membrane protein essential for neuropeptide maturation. It catalyzes the C-terminal amidation of peptides via two sequential enzymatic domains: peptidylglycine  $\alpha$ -hydroxylating monooxygenase (PHM, ~44-46 kDa) and peptidyl- $\alpha$ -hydroxyglycine  $\alpha$ -amidating lyase (PAL, ~50 kDa), which together convert glycine-extended precursors into bioactive amidated peptides. PAM undergoes alternative splicing, generating integral membrane isoforms such as PAM-1 (~120 kDa) and PAM-2 (~105 kDa). Endoproteolytic cleavage produces soluble monofunctional PHM and PAL, as well as a bifunctional ~75 kDa fragment. The cleaved cytosolic domain (sfCD, ~16 kDa) can translocate to the nucleus, influencing gene expression. PAM also supports angiogenesis and tumor progression, notably in glioblastoma, highlighting its therapeutic potential (PMID: 8436961; PMID: 32054826).

## Storage

**Storage:**

Store at -20°C. Stable for one year after shipment.

**Storage Buffer:**

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:

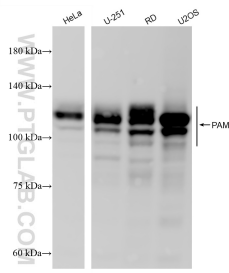
T: 4006900926

E: Proteintech-CN@ptglab.com

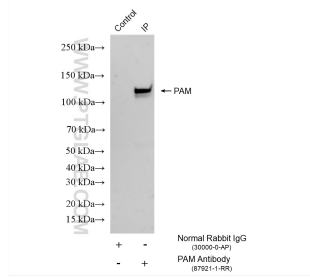
W: ptgcn.com

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

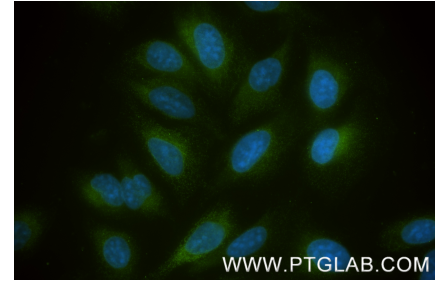
## Selected Validation Data



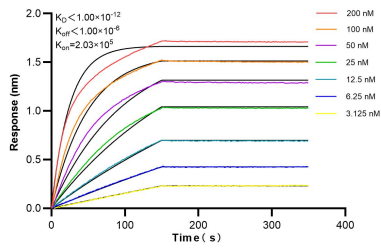
Various lysates were subjected to SDS PAGE followed by western blot with 87921-1-RR (PAM antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



IP result of anti-PAM (IP:87921-1-RR, 4ug; Detection:87921-1-RR 1:1000) with U2OS cells lysate 800 ug.



Immunofluorescent analysis of (-20°C Methanol) fixed U2OS cells using PAM antibody (87921-1-RR, Clone: 260074A10) at dilution of 1:400 and CoraLite® 488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2).



Biolayer interferometry (BLI) kinetic assays of 87921-1-RR against Human PAM were performed. The affinity constant is below 1 pM.