

For Research Use Only

# PAM Recombinant monoclonal antibody, PBS Only

Catalog Number: 87921-1-PBS



## Basic Information

<b>Catalog Number:</b> 87921-1-PBS	<b>GenBank Accession Number:</b> NM_001177306.2	<b>Purification Method:</b> Protein A purification
<b>Source:</b> Rabbit	<b>GeneID (NCBI):</b> 5066	<b>CloneNo.:</b> 260074A10
<b>Isotype:</b> IgG	<b>UNIPROT ID:</b> P19021-1	
<b>Immunogen Catalog Number:</b> EG5194	<b>Full Name:</b> peptidylglycine alpha-amidating monooxygenase	
	<b>Calculated MW:</b> 108 kDa	
	<b>Observed MW:</b> 75 kDa and 105-120 kDa	

## Applications

**Tested Applications:**  
WB, IF/ICC, IP, Indirect ELISA

**Species Specificity:**  
human

## 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 -80°C.  
**The product is shipped with ice packs. Upon receipt, store it immediately at -80°C**

**Storage Buffer:**  
PBS only, pH7.3

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

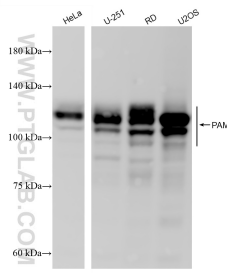
T: 4006900926

E: [Proteintech-CN@ptglab.com](mailto:Proteintech-CN@ptglab.com)

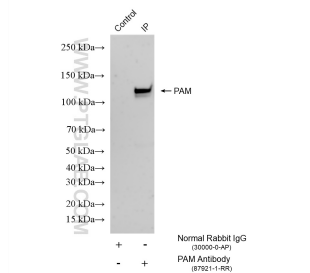
W: [ptgcn.com](http://ptgcn.com)

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

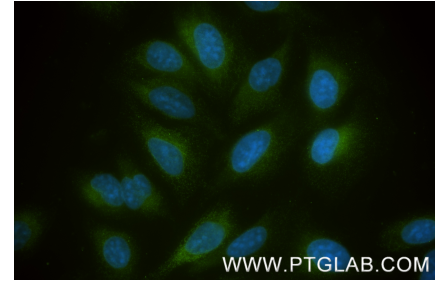
## Selected Validation Data



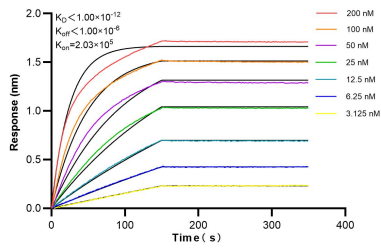
Various lysates were subjected to SDS PAGE followed by western blot with 87921-1-RR (PAM antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 87921-1-PBS in a different storage buffer formulation.



IP result of anti-PAM (IP:87921-1-RR, 4ug; Detection:87921-1-RR 1:1000) with U2OS cells lysate 800 ug. This data was developed using the same antibody clone with 87921-1-PBS in a different storage buffer formulation.



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). This data was developed using the same antibody clone with 87921-1-PBS in a different storage buffer formulation.



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