

For Research Use Only

PAM Recombinant monoclonal antibody

Catalog Number: 87921-1-RR



Basic Information

Catalog Number: 87921-1-RR	GenBank Accession Number: NM_001177306.2	Purification Method: Protein A purification
Size: 100ul , Concentration: 1000 µg/ml by Nanodrop;	GeneID (NCBI): 5066	CloneNo.: 260074A10
Source: Rabbit	UNIPROT ID: P19021-1	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
Isotype: IgG	Full Name: peptidylglycine alpha-amidating monooxygenase	
Immunogen Catalog Number: EG5194	Calculated MW: 108 kDa	
	Observed MW: 75 kDa and 105-120 kDa	

Applications

Tested Applications: WB, IF/ICC, IP, ELISA	Positive Controls:
Species Specificity: human	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 α -hydroxylating monooxygenase (PHM, ~44-46 kDa) and peptidyl- α -hydroxyglycine α -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

*** 20ul sizes contain 0.1% BSA

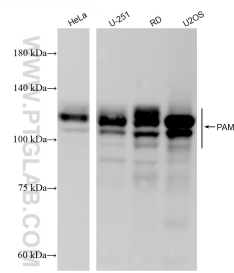
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

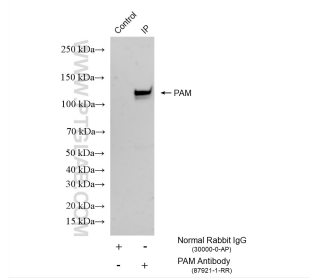
E: proteintech@ptglab.com
W: ptglab.com

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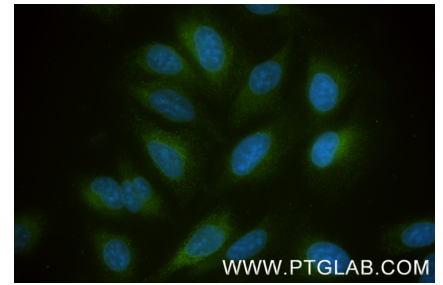
Selected Validation Data



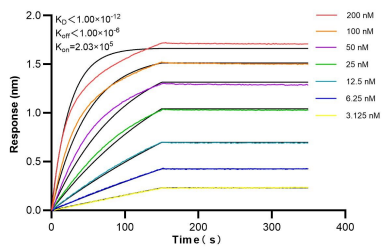
Various lysates were subjected to SDS PAGE followed by western blot with 87921-1-RR (PAM antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



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.