For Research Use Only

PAM Recombinant monoclonal antibody, PBS Only

Catalog Number:87921-1-PBS

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

Basic Information

Catalog Number:
87921-1-PBS

Size:
100ug , Concentration: 1 mg/ml by Nanodrop;

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

Applications

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

Species Specificity:
human

Background Information

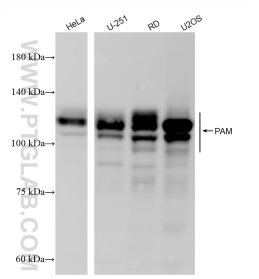
Peptidyl-glycine alpha-amidating monooxygenase (PAM) is a bifunctional type I membrane protein essential for neuropeptide maturation. It catalyzes the C-terminal amidation of peptides via two sequential enzymatic domains: peptidylglycine α-hydroxylating monooxygenase (PHM, ~44-46 kDa) and peptidyl-α-hydroxyglycine 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

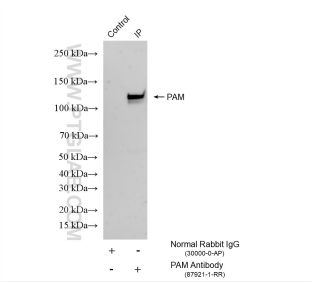
Storage:
Store at -80°C.
Storage Buffer:
PBS only, pH7.3

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

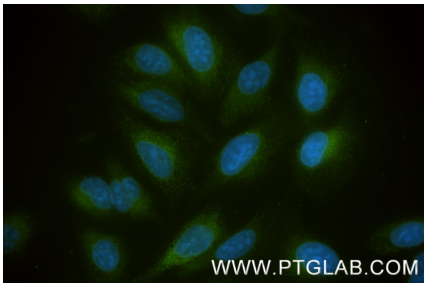
Selected Validation Data



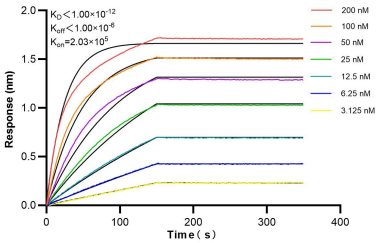
Various lysates were subjected to SDS PAGE followed by western blot with 87921-1-RR (PAM antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 87921-1-PBS in a different storage buffer formulation.



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.