

**PAM/Peptidylglycine 2 hydroxylase Polyclonal Antibody**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP57819**

## Specification

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### PAM/Peptidylglycine 2 hydroxylase Polyclonal Antibody - Product Information

Application	WB, IHC-P
Primary Accession	<a href="#">P19021</a>
Reactivity	Rat, Pig, Dog, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	108332

### PAM/Peptidylglycine 2 hydroxylase Polyclonal Antibody - Additional Information

Gene ID 5066

#### Other Names

Peptidyl-glycine alpha-amidating monooxygenase, PAM, Peptidylglycine alpha-hydroxylating monooxygenase, PHM, 1.14.17.3, Peptidyl-alpha-hydroxyglycine alpha-amidating lyase, 4.3.2.5, Peptidylamidoglycolate lyase, PAL, PAM {ECO:0000303|PubMed:12699694, ECO:0000312|HGNC:HGNC:8596}

#### Format

0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glycerol

#### Storage

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

### PAM/Peptidylglycine 2 hydroxylase Polyclonal Antibody - Protein Information

**Name** PAM {ECO:0000303|PubMed:12699694, ECO:0000312|HGNC:HGNC:8596}

#### Function

Bifunctional enzyme that catalyzes the post-translational modification of inactive peptidylglycine precursors to the corresponding bioactive alpha-amidated peptides, a terminal modification in biosynthesis of many neural and endocrine peptides (PubMed:<a href="http://www.uniprot.org/citations/12699694" target="\_blank">12699694</a>). Alpha-amidation involves two sequential reactions, both of which are catalyzed by separate catalytic domains of the enzyme. The first step, catalyzed by peptidyl alpha-hydroxylating monooxygenase (PHM) domain, is the copper-, ascorbate-, and O<sub>2</sub>- dependent stereospecific hydroxylation (with S stereochemistry) at the alpha-carbon (C-alpha) of the C-terminal glycine of the peptidylglycine substrate (PubMed:<a href="http://www.uniprot.org/citations/12699694" target="\_blank">12699694</a>). The second step, catalyzed by the peptidylglycine amidoglycolate lyase (PAL) domain, is the zinc- dependent cleavage of the N-C-alpha bond, producing the alpha-amidated peptide and glyoxylate (PubMed:<a href="http://www.uniprot.org/citations/12699694" target="\_blank">12699694</a>). Similarly,

catalyzes the two- step conversion of an N-fatty acylglycine to a primary fatty acid amide and glyoxylate (By similarity).

#### Cellular Location

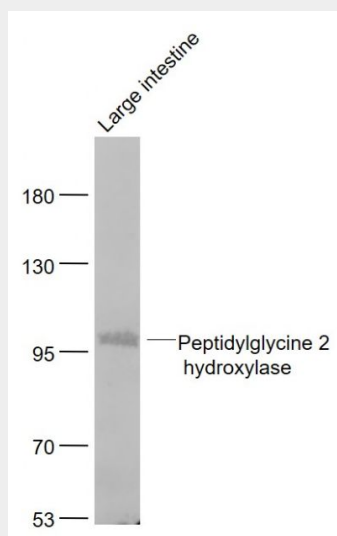
Cytoplasmic vesicle, secretory vesicle membrane {ECO:0000250|UniProtKB:P10731}; Single-pass membrane protein {ECO:0000250|UniProtKB:P10731}. Note=Secretory granules {ECO:0000250|UniProtKB:P10731} [Isoform 2]: Membrane; Single-pass type I membrane protein [Isoform 4]: Secreted. Note=Secreted from secretory granules

### PAM/Peptidylglycine 2 hydroxylase Polyclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### PAM/Peptidylglycine 2 hydroxylase Polyclonal Antibody - Images



#### Sample:

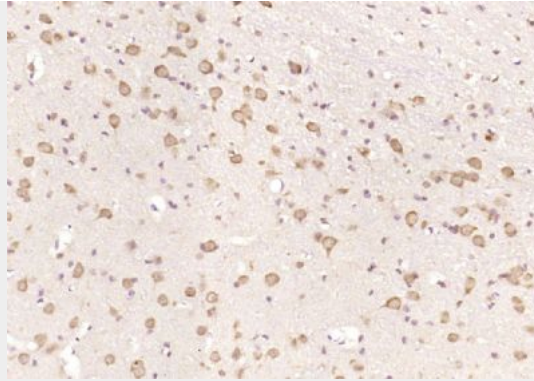
Large intestine (Mouse) Lysate at 40 ug

Primary: Anti- PAM/Peptidylglycine 2 hydroxylase (bs-21009R) at 1/1000 dilution

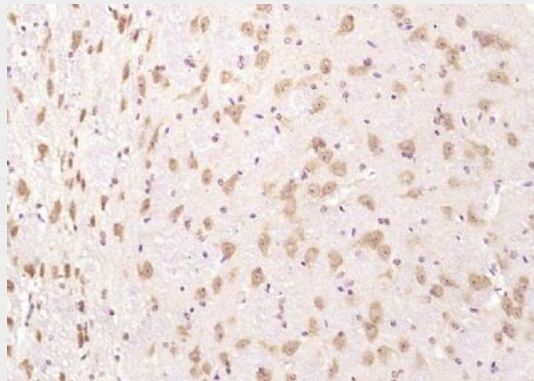
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 108 kD

Observed band size: 108 kD



Paraformaldehyde-fixed, paraffin embedded (rat brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (PAM Peptidylglycine 2 hydroxylase) Polyclonal Antibody, Unconjugated (bs-21009R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (PAM Peptidylglycine 2 hydroxylase) Polyclonal Antibody, Unconjugated (bs-21009R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.