

Product datasheet for **MC222896**

Pam (NM_013626) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Pam (NM_013626) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Pam
Synonyms:	PHM
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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Fully Sequenced ORF:

>MC222896 representing NM_013626

Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCCGGACGCGCCCGAGCCGCTGCTGCTGCTGCTGGGGCTGCTCGCCTTGACAGCAGCTGCCTGG
CCTTCAGAAGCCCACTTTCTGTCTTTAAGAGGTTTAAAGAACTACCAGATCATTTCCAATGAATGCCT
TGGTACCACCAGACCCATCACTCTATTGATTCTTCGGATTTTACTGATGATATTCGCATGCCTGGGGT
ACACCTAAAGAGTCTGACACGACTTCTGCATGTCATGCGTCTGCCTGTGGATGAGGAAGCCTTCGTGA
TTGACTTCAAGCCTCGGGCCAGCATGGACACTGTCCACCATATGCTGCTGTTGGATGCAACATGCCCTC
ATCCACTGGGAGTTACTGGTTTTGTGATGAAGGAACCTGTACAGATAAAGCCAATATTCTATATGCCTGG
GCAAGAAATGCTCCCCACCCGGCTCCCTAAAGGTGTTGGATTGAGAGTTGGAGGGAACTGGAAGCA
AATACTTCGTCTCAAGTTCACATGAGGACATCAGTCTTTTCGAGATAATCACAAGACTGTTCCGG
TGTGTCCTTACATCTCACACGTGTCCACAGCCTTTGATTGCGGGCATGTACCTTATGATGTCTGTCAAC
ACTGTTATACCCAGGAGAGAAAGTAGTAATTCGACATTCGTGCCATTACAAAATGTATCCAATGC
ATGTGTTTGCCTACCGAGTCCATACTCACCATTAGGTAAGGTAGTGAAGTGGATACAGAGTAAGAACCG
ACAGTGGACGCTGATTGGACGCCAGAGCCCCAGCTGCCACAGGCTTTTTACCCAGTGGAAACCCAGTA
GATGTTGCTTTTGGTGATATACTGGCAGCCAGATGTGTGTTCACTGGTGAGGGGAGGACCGAAGCCACC
ACATCGGCGGCACATCTAGTGATGAAATGTGCACTTGTACATTATGATTACATGGAAGCCAAGCATGC
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ATTCCAATTCCTGTAATAACCGACATGGTTATGATCCATGGGCATCACAAGAAACAGAAAACAAAGAAA
AGAGTGCTTTAATACAGCAGCCAAAGCAGGGAGAGGAGGAAAGCCTTCGAGCAGGGTATTCTATTACT
ACTTTCCAAGCTGCTAGGAGAAAAGGAAGATGTTGTTTATGTGCACAAATAAATCCTACAGAAAAGACA
GAATCTGGGTGAGACCTGGTAGCTGAGATTGCAACAGTGTCCAGAAAAAGGACCTTGGTCGGTCTGACG
CCAGAGAGGGAGCGGAGCATGAGGAAGGGGTAATGCTATCCTGGTCAGAGACAGGATCCACAAATTCAC
CAGGCTAGAGTCAACCTTGGCCAGCTGAGAGCAGAGCTCTATCCTTCCAGCAGCCTGGTGAAGGTCT
TGGGAACCAGAACTCGCAGGAGATTTCCATGTGGAAGAAGCACTGGAGTGGCCTGGAGTGTACTTGTAC
CAGGCCAGGTTTCTGGGGTGGCCCTGGATTCTAAGAATAACCTTGTGATTTTCCACAGAGGTGACCATGT
TTGGGATGAAACTCTTTGACAGCAAGTTCGTTTACCAAAAGAGGTCTTGGACCAATGAAGAAGAT
ACCATCCTGGTCATTGACCCAAATAAAGCTGAAATACTCCAGTCCAGCGCAAGAATCTGTTTTATTAC
CGCATGGTTTGGCATAGATACAGATGGAATATTGGGTACGGATGTGGCTCTCCATCAGGTGTTCAA
ATTGGAACCAGTAGCAAGAAGGCCCTCTCTAGTCTGGGAAGGAGCATGCAACCTGGCAGCGACCAA
AATCATTTCTGCCAGCCCACTGATGTGGCGGTGGAGCCAGTACTGGAGCTGTCTTCGTGTGATGGTT
ACTGCAACAGTGGATCGTGCAGTTCTACCAAGCGGGAAGTTCATCACTCAGTGGGGAGAAGAGTCTTC
TGGGAGCAGTCTAAGCCAGGGCAGTTCAGTGTTCCTCACAGTTTGGCCCTTGTGCCTCACCTGAACCAG
TTGTGTGGCCGATAGGGAATAAGCCGATCCAGTGTTCAGACTGACACCAAGAATTTGTGAGAG
AGATTAAGCATGCGTCAATTTGGAAGGAATGTCTTTGCAATCTCATATATACCAGTTTCTCTTTGCAGT
AAATGGGAAGCCTTACTTTGGAGACCAAGAACCCTGCAAGGATTTGTGATGAACTTTTCCAGTGGGGAA
ATTATAGATGTTTTCAAACCAAGTTCGCAAGCACTTTGACATGCCTCATGATATTGTGGCTTCTGAAGATG
GGACTGTGTACATTGGCGACGCACACAAACCCGTGTGGAAGTTCACCCTCACTGAAAGCAGGCTGGA
AGTGGAGCATCGATCAGTTAAAAAGGCTGGCATTGAGGTCCCGGAAATCAAAGCCGAGGCAGTTGTTGAA
CCCAAAGTGAAGAACAACCCACCTCTCAGAATTGCAGAAGATGCAGGAGAAAAAGAACTGATCAAAG
ATCCAGGCTCGGGAGTGCCTGTGGTTCTCATTACAACCTTCTGGTTATCCCTGTGGTTGCTCCTGCTGGC
CATTGCCATGTTTATTCGATGGAAAAATCAAGGGCCTTTGGAGATCATGACCGAAAGCTCGAGTCGAGT
TCTGGAAGAGTACTGGGAAGACTCCGAGGAAAGGAAGCAGCGGCTTAAATCTAGGAAATTTCTTTGCAA
GCCGGAAGGCTACAGCAGAAAAGGTTTCGACCGAGTGTGACACAGAGGGGAGTGACCAAGAGAAGGACGA
AGATGATGGAAGTGAGTCTGAAGAGGAGTACTCGGCTCCGCTGCCCACTCTGCACCTTCTCTCTGA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites:	Sgfl-Mlul
ACCN:	NM_013626
Insert Size:	2937 bp
OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
Components:	The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).
Reconstitution Method:	<ol style="list-style-type: none">1. Centrifuge at 5,000xg for 5min.2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.3. Close the tube and incubate for 10 minutes at room temperature.4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.
RefSeq:	NM_013626.3 , NP_038654.2
RefSeq Size:	4149 bp
RefSeq ORF:	2937 bp
Locus ID:	18484
UniProt ID:	P97467
Cytogenetics:	1 47.76 cM
Gene Summary:	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 (By similarity). 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 ₂ - dependent stereospecific hydroxylation (with S stereochemistry) at the alpha-carbon (C-alpha) of the C-terminal glycine of the peptidylglycine substrate (By similarity). 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 (By similarity). Similarly, catalyzes the two-step conversion of an N-fatty acylglycine to a primary fatty acid amide and glyoxylate (Probable).[UniProtKB/Swiss-Prot Function]