

Product datasheet for **MG223751**

Pam (NM_013626) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Pam (NM_013626) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Pam
Synonyms:	PHM
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide
Sequence:

>MG223751 representing NM_013626
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCCGCATCGCC

ATGGCCGGACGCGCCCGCAGCCGCTGCTGCTGCTGCTGGGGCTGCTCGCCTTGACAGCAGCTGCCTGG
 CCTTCAGAAGCCCACTTTCTGTCTTTAAGAGGTTTAAAGAACTACCAGATCATTTCCTCAATGAATGCCT
 TGGTACCACCAGACCCATCACTCTATTGATTCTTCGGATTTTACTGATGATATTCGCATGCCTGGGGT
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 AGATGATGGAAGTGAAGTCTGAAGAGGAGTACTCGGCTCCGCTGCCCACTCTGCACCTTCTCTC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG223751 representing NM_013626
 Red=Cloning site Green=Tags(s)

MAGRARSRLLLLLGLLALQSSCLAFRSPLSVFKRFKETTTRFSNECLGTRPITPIDSSDFTLDIRMPGV
 TPKESDTYFCMSMRLPVDEEAFVIDFKPRASMDTVHHMLLFGCNMPSSTGSYWFCDGCTDKANILYAW
 ARNAPPTRLPKGVGFRVGGGETGSKYFVLQVHYGDISAFRDNHKDCSGVSLHLTRVPQPLIAGMYLMMSVN
 TVIPPGEKVVNSDISCHYKMYPMHVFAYRVHTHHLGKVVSGYRVRNGQWTLIGRQSPQLPQAFYPVEHPV
 DVAFGDILAARCFTGEGRTEATHIGGTSSEMCLYIMYYMEAKHAVSFMTCTQNVAPDMFRTIPEEAN
 IPIPVKSDMVMIHGHHKETENKEKSALIQPKQGEAAFEQGDYFSLLSKLLGEREDVVHVHKNPTEKT
 ESGSDLVAEIANVVQKDLGRSDAREGAEEEGNAILVRDRIHKFHRLESTLRPAESRALSFQQPGEGP
 WEPELAGDFHVEEALWPGVYLLPGQVSGVALDSKNNLVIFHRGDHVDGNSFDSKFVYQQRGLGPIEED
 TILVIDPNKAEILQSSGKNLFYLPGLSIDTDGNYWTDVALHQVFKLEPRSKEGPLLVLGRSMQPGSDQ
 NHFCQPTDVAVEPSTGAVFVSDGYCNSRIVQFSPSGKFIQWGEESGSSPKPGQFVPHSLALVPHLNQ
 LCVADRENGRIQCFKTDTKFVREIKHASFGRNVFAISYIPGFLFAVNGKPYFGDQEPVQGFVMNFSSE
 IIDVFKPVRKHFDPHDI VASEDGTVYIGDAHTNTVWKFTL TESRLEVEHRSVKKAGIEVPEIKAEAVVE
 PKVKNKPTSSELQKMQEKKLIKDPGSGVPVLLITLLVIPVVLLAIAMFIRWKKSRAFGDHDKRLESS
 SGRVLRGLRGKSSGLNLGNFFASRKGYSRKGFDRVSTEGSDQEKDEDDGSEEEYSAPLPTPAPSS

TRTRPLE - GFP Tag - V

Restriction Sites:

SgfI-MluI

Cloning Scheme:

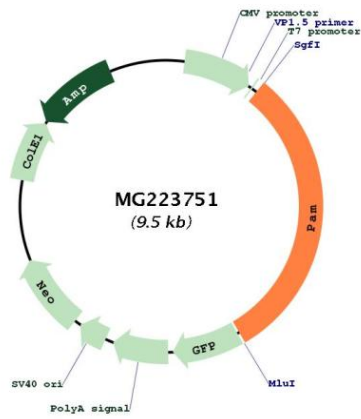


ACCN: NM_013626

ORF Size: 2934 bp

OTI Disclaimer:	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. More info
OTI Annotation:	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
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]

Product images:



Circular map for MG223751