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# Product datasheet for MR223751

## Pam (NM_013626) Mouse Tagged ORF Clone

### Product data:

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

**ORF Nucleotide Sequence:**

>MR223751 representing NM_013626
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCCGGACGCGCCCGCAGCCGCCTGCTGCTGCTGCTGGGGCTGCTCGCCTTGCAGAGCAGCTGCCTGG
CCTTCAGAAGCCCACTTTCTGTCTTTAAGAGGTTTAAAGAAACTACCAGATCATTTTCCAATGAATGCCT
TGGTACCACCAGACCCATCACTCCTATTGATTCTTCGGATTTTACACTGGATATTCGCATGCCTGGGGTC
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ATCCACTGGGAGTTACTGGTTTTGTGATGAAGGAACCTGTACAGATAAAGCCAATATTCTATATGCCTGG
GCAAGAAATGCTCCCCCCACCCGGCTCCCTAAAGGTGTTGGATTCAGAGTTGGAGGGGAAACTGGAAGCA
AATACTTCGTCCTTCAAGTTCACTATGGGGACATCAGTGCTTTTCGAGATAATCACAAAGACTGTTCCGG
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GCCGGAAAGGCTACAGCAGAAAAGGGTTCGACCGAGTGAGCACAGAGGGGAGTGACCAAGAGAAGGACGA
AGATGATGGAAGTGAGTCTGAAGAGGAGTACTCGGCTCCGCTGCCCACTCCTGCACCTTCCTCC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>MR223751 representing NM_013626
Red=Cloning site Green=Tags(s)

MAGRARSRLLLLLGLLALQSSCLAFRSPLSVFKRFKETTRSFSNECLGTTRPITPIDSSDFTLDIRMPGV
TPKESDTYFCMSMRLPVDEEAFVIDFKPRASMDTVHHMLLFGCNMPSSTGSYWFCDEGTCTDKANILYAW
ARNAPPTRLPKGVGFRVGGETGSKYFVLQVHYGDISAFRDNHKDCSGVSLHLTRVPQPLIAGMYLMMSVN
TVIPPGEKVVNSDISCHYKMYPMHVFAYRVHTHHLGKVVSGYRVRNGQWTLIGRQSPQLPQAFYPVEHPV
DVAFGDILAARCVFTGEGRTEATHIGGTSSDEMCNLYIMYYMEAKHAVSFMTCTQNVAPDMFRTIPEEAN
IPIPVKSDMVMIHGHHKETENKEKSALIQQPKQGEEEAFEQGDFYSLLSKLLGEREDVVHVHKYNPTEKT
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TILVIDPNKAEILQSSGKNLFYLPHGLSIDTDGNYWVTDVALHQVFKLEPRSKEGPLLVLGRSMQPGSDQ
NHFCQPTDVAVEPSTGAVFVSDGYCNSRIVQFSPSGKFITQWGEESSGSSPKPGQFSVPHSLALVPHLNQ
LCVADRENGRIQCFKTDTKEFVREIKHASFGRNVFAISYIPGFLFAVNGKPYFGDQEPVQGFVMNFSSGE
IIDVFKPVRKHFDMPHDIVASEDGTVYIGDAHTNTVWKFTLTESRLEVEHRSVKKAGIEVPEIKAEAVVE
PKVKNKPTSSELQKMQEKKKLIKDPGSGVPVVLITTLLVIPVVVLLAIAMFIRWKKSRAFGDHDRKLESS
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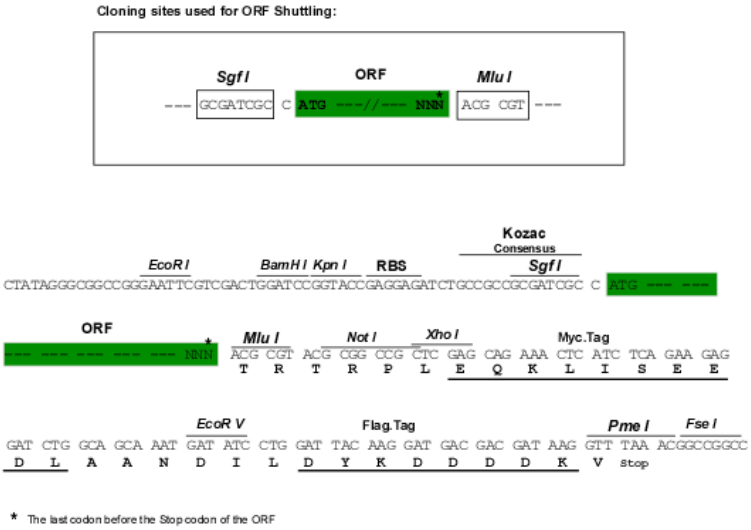
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** https://cdn.origene.com/chromatograms/mm9002_f10.zip

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

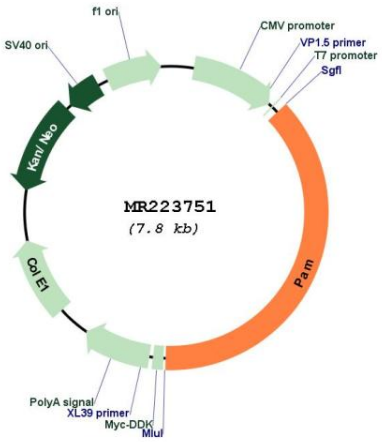



**ACCN:** NM_013626

**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:** | 1. Centrifuge at 5,000xg for 5min.<br>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.<br>3. Close the tube and incubate for 10 minutes at room temperature.<br>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.<br>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 |
| **MW:** | 109.3 kDa |
| **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 monoxygenase (PHM) domain, is the copper-, ascorbate-, and O2- 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 MR223751