

Product datasheet for **RC216147**

PAM (NM_138822) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PAM (NM_138822) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PAM
Synonyms:	PAL; PHM
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide
Sequence:

>RC216147 representing NM_138822
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGCTGGCCGCTCCCTAGCCTGCTAGTTCTCCTTGTGTTTTTCCAAGCAGCTGTTTGGCTTCCGAAGCC
 CACTTTCTGTCTTTAAGAGGTTTAAAGAACTACCAGACCATTTTCCAATGAATGTCTTGGTACCACCAG
 ACCCGTAGTTCCTATTGATTCATCAGATTTTGCATTGGATATTCGCATGCCTGGGGTTACACCTAAACAG
 TCCGATACATACTTCTGCATGTCTATGCGAATACCAGTGGATGAGGAAGCCTTCGTGATTGACTTCAAGC
 CTCGAGCCAGCATGGATACTGTCCATCACATGTTACTTTTTGGATGCAATATGCCTTCATCCACTGGAAG
 TTAAGTGGTTTTGTGATGAAGGAACCTGTACAGATAAAGCCAATATTCTGTATGCCTGGGCGAGAAATGCT
 CCCCTACCCGGCTCCCAAAGGTGTTGGATTGAGAGTGGAGGAGAGACTGGAAGTAAATACTTTGTAC
 TACAGGTACACTATGGGGATATTAGTGTCTTTAGAGATAATAACAAGGACTGTTCTGGTGTGCTTACA
 CCTCACACGTCTGCCACAGCCTTAATTGCTGGCATGTACCTTATGATGTCTGTTGACACTGTTATCCCA
 GCAGGAGAAAAAGTGGTGAATTCTGACATTTTCATGCCATTATAAAAAATTCCAATGCATGTCTTTGCCCT
 ATAGAGTTCACACTCACCATTTAGGTAAGGTAGTAAGTGGATACAGAGTAAGAAATGGACAGTGGACACT
 GATTGGACGGCAGAGCCCTCAGCTGCCACAGGCTTCTACCCTGTGGGGCATCCAGTTGATGTAAGTTTT
 GGTGACCTACTGGCTGCAAGATGTGATTCACTGGTGAAGGAAGGACAGAAGCCACACACATTGGTGGCA
 CGTCTAGTGATGAAATGTGCACTTATACATTATGATTACATGGAAGCCAAGCATGCAGTTTCTTTTCAT
 GACCTGTACCCAGAATGTAGTCCAGATATGTTGAGAACCATACCACCAGAGGCCAACATCCAATTCCC
 GTGAAGTCTGATATGTTATGATGCATGAACATCATAAAGAAACAGAATATAAAGATAAAGATTCCCTTAC
 TACAGCAGCCAAAACGAGAAGAAGAAGTGTAGACCAGGGTATTCTATTCACTACTTTCCAAGT
 GCTAGGAGAAAAGGAAGATGTTGTTTCATGTGCACAAATAAATCCTACAGAAAAGGCAGAATCAGAGTCA
 GACCTGGTAGCTGAGATTGCAAATGTAGTCCAAAAAAGGATCTTGGTGCATCTGATGCCAGAGAGGGTG
 CAGAACATGAGAGGGGTAATGCTATTCTTGTGAGAGACAGAATTCACAAATCCACAGACTAGTATCTAC
 CTTGAGGCCACCAGAGAGCAGAGTTTTCTCATTACAGCAGCCCCACCTGGTGAAGGCACCTGGGAACCA
 GAACACACAGGAGATTTCCACATGGAAGAGGCACTGGATTGGCCTGGAGTATACTTGTACCAGGCCAGG
 TTTCTGGGGTGGCTCTAGACCCTAAGAATAACCTGGTGTATTTCCACAGAGGTGACCATGTCTGGGATGG
 AAACCTGTTTACAGCAAGTTTGTACCAGCAAATAGGACTCGGACCAATTGAAGAAGACACTATTCTT
 GTCATAGATCCAATAATGCTGCAGTACTCCAGTCCAGTGGAAAAATCTGTTTTACTTGCCACATGGCT
 TGAGTATAGATAAAGATGGGAATTATTGGGTACAGACGTGGCTCTCCATCAGGTGTTCAAACCTGGATCC
 AAACAATAAAGAAGGCCCTGTATTAATCCTGGGAAGGAGCATGCAACCAGGCAGTGACCAGAATCACTTC
 TGTCAACCCTACTGATGTGGCTGTGGATCCAGGCACTGGAGCCATTTATGTATCAGATGGTACTGCAACA
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 TCCTCTGCCAGGCCAGTTCAGTGTCTCACAGCTTGGCTCTTGTGCCTCTTTGGGCCAATTATGTGTG
 GCAGACCCGGAAAATGGTCGGATCCAGTGTAAAACTGACACCAAAGAATTTGTGAGAGAGATTAAGC
 ATTCATCATTTGGAAGAAATGATTTGCAATTTATATACCAGGCTTGCTCTTTGCAGTGAATGGGAA
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 ATCTTCAAGCCAGTGCAGCAAGCACTTTGATATGCCTCATGATATTGTTGCATCTGAAGATGGGACTGTGT
 ACATTGGAGATGCTCATACCAACACCGTGTGGAAGTTCACCTTGACTGAGAAAATTGGAACATCGATCAGT
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 TTTGCAAGCCGTAAGGGCTACAGTCGAAAAGGGTTTGACCGGCTTAGCACTGAGGGCAGTGACCAAGAGA
 AAGAGGATGATGGAAGTGAATCAGAAGAGGAGTATTCAGCACCTGCTGCGCTCGCACCTTCTCTCTC
 C

ACCGGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC216147 representing NM_138822
 Red=Cloning site Green=Tags(s)

MAGRVPSLLVLLVFPSSCLAFRSPLSVFKRFKETTRPFSNECLGTTTRPVVPIDSSDFALDIRMPGVTPKQ
 SDTYFCMSMRIPVDEEAFVIDFKPRASMDTVHHMLLFGCNMPSSTGSYWFCEGTCTDKANILYAWARNA
 PPTRLPGKGVGFRVGGETGSKYFVLQVHYGDISAFRDNNKDCSGVSLHLTRLPQPLIAGMYLMMSVDTVIP
 AGEKVVNSDISCHYKNYPMHVFA YRVHTHHLGKVVSGYRVRNGQWTLIGRQSPQLPQAFYPVGHVDPVVSF
 GDLLAARCVFTGEGRTEATHIGGTSSDEMCLYIMYYEAKHAVSFMTCTQNVAPDMFRTIPPEANIPIP
 VKSDMVMMEHHKETEYKDKIPLLQQPKREEEVLDQGDYFSLLSKLLGEREDVVHVHKYNPTEKAES
 DLVAEIANVVQKKDLGRSDAREGAEHERGNAILVRDRIHKFHRLVSTLRPPESRVFSLQQPPPGEETWEP
 EHTGDFHMEEALDWPGVYLLPGQVSGVALDPKNNLVIFHRGDHVWDGNSFDSKFVYQQIGLPIEEDTIL
 VIDPNNAAVLQSSGKNLFYLPGLSIDKDGNYWVDVALHQVFKLDPNNKEGPVILGRSMQPGSDQNH
 CQPTDVAVDPGTGAIYVSDGYCNSRIVQFSPSGKFITQWGEESGSSPLPGQFTVPHSLALVPLLGQLCV
 ADRENGRIQCFTDTEKFVREIKHSSFRNVFAISYIPGLLFAVNGKPHFGDQEPVQGFVMNFNGEIID
 IFKPVKHFDMPHDIVASEDGTYYIGDAHTNTVWKFTL TEKLEHRSVKKAGIEVQEIKGKSGGLNLGNF
 FASRKGYSRKGFDRLSTEGSDQEKEDDGESEEEYSAPLPALAPSSS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:



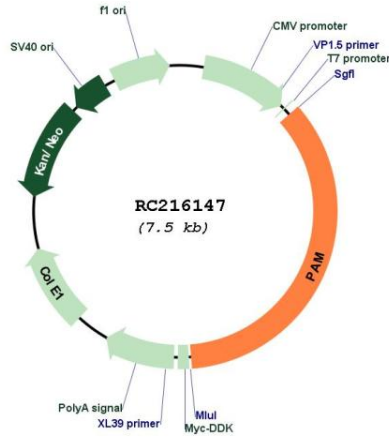
ACCN: NM_138822

ORF Size:	2661 bp
OTI Disclaimer:	<p>Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>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</p>
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_138822.2 , NP_620177.1
RefSeq Size:	5098 bp
RefSeq ORF:	2664 bp
Locus ID:	5066
UniProt ID:	P19021
Cytogenetics:	5q21.1
Protein Families:	Druggable Genome, Transmembrane
MW:	98.8 kDa

Gene Summary:

This gene encodes a multifunctional protein. The encoded preproprotein is proteolytically processed to generate the mature enzyme. This enzyme includes two domains with distinct catalytic activities, a peptidylglycine alpha-hydroxylating monooxygenase (PHM) domain and a peptidyl-alpha-hydroxyglycine alpha-amidating lyase (PAL) domain. These catalytic domains work sequentially to catalyze the conversion of neuroendocrine peptides to active alpha-amidated products. Alternative splicing results in multiple transcript variants, at least one of which encodes an isoform that is proteolytically processed. [provided by RefSeq, Jan 2016]

Product images:



Circular map for RC216147