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Product datasheet for SC111663

PAM (NM_000919) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PAM (NM_000919) Human Untagged Clone
Tag:	Tag Free
Symbol:	PAM
Synonyms:	PAL; PHM
Mammalian Cell Selection:	None
Vector:	pCMV6-XL5
E. coli Selection:	Ampicillin (100 ug/mL)

View online »

Fully Sequenced ORF:

>NCBI ORF sequence for NM_000919, the custom clone sequence may differ by one or more nucleotides

ATGGCTGGCCGCGTCCCTAGCCTGCTAGTTCTCCTTGTTTTTCCAAGCAGCTGTTTGGCTTTCCGAAGCC
CACTTTCTGTCTTTAAGAGGTTTAAAGAAACTACCAGACCATTTTCCAATGAATGTCTTGGTACCACCAG
ACCCGTAGTTCCTATTGATTCATCAGATTTTGCATTGGATATTCGCATGCCTGGGGTTACACCTAAACAG
TCCGATACATACTTCTGCATGTCTATGCGAATACCAGTGGATGAGGAAGCCTTCGTGATTGACTTCAAGC
CTCGAGCCAGCATGGATACTGTCCATCACATGTTACTTTTTGGATGCAATATGCCTTCATCCACTGGAAG
TTACTGGTTTTGTGATGAAGGAACCTGTACAGATAAAGCCAATATTCTGTATGCCTGGGCGAGAAATGCT
CCCCCTACCCGGCTCCCCAAAGGTGTTGGATTCAGAGTTGGAGGAGAGACTGGAAGTAAATACTTTGTAC
TACAGGTACACTATGGGGATATTAGTGCTTTTAGAGATAATAACAAGGACTGTTCTGGTGTGTCCTTACA
CCTCACACGTCTGCCACAGCCTTTAATTGCTGGCATGTACCTTATGATGTCTGTTGACACTGTTATCCCA
GCAGGAGAAAAAGTGGTGAATTCTGACATTTCATGCCATTATAAAAATTATCCAATGCATGTCTTTGCCT
ATAGAGTTCACACTCACCATTTAGGTAAGGTAGTAAGTGGATACAGAGTAAGAAATGGACAGTGGACACT
GATTGGACGGCAGAGCCCTCAGCTGCCACAGGCTTTCTACCCTGTGGGGCATCCAGTTGATGTAAGTTTT
GGTGACCTACTGGCTGCAAGATGTGTATTCACTGGTGAAGGAAGGACAGAAGCCACACACATTGGTGGCA
CGTCTAGTGATGAAATGTGCAACTTATACATTATGTATTACATGGAAGCCAAGCATGCAGTTTCTTTCAT
GACCTGTACCCAGAATGTAGCTCCAGATATGTTCAGAACCATACCACCAGAGGCCAACATTCCAATTCCC
GTGAAGTCTGATATGGTTATGATGCATGAACATCATAAAGAAACAGAATATAAAGATAAGATTCCTTTAC
TACAGCAGCCAAAACGAGAAGAAGAAGAAGTGTTAGACCAGGGTGATTTCTATTCACTACTTTCCAAGCT
GCTAGGAGAAAGGGAAGATGTTGTTCATGTGCACAAATATAATCCTACAGAAAAGGCAGAATCAGAGTCA
GACCTGGTAGCTGAGATTGCAAATGTAGTCCAAAAAAAGGATCTTGGTCGATCTGATGCCAGAGAGGGTG
CAGAACATGAGAGGGGTAATGCTATTCTTGTCAGAGACAGAATTCACAAATTCCACAGACTAGTATCTAC
CTTGAGGCCACCAGAGAGCAGAGTTTTCTCATTACAGCAGCCCCCACCTGGTGAAGGCACCTGGGAACCA
GAACACACAGGAGATTTCCACATGGAAGAGGCACTGGATTGGCCTGGAGTATACTTGTTACCAGGCCAGG
TTTCTGGGGTGGCTCTAGACCCTAAGAATAACCTGGTGATTTTCCACAGAGGTGACCATGTCTGGGATGG
AAACTCGTTTGACAGCAAGTTTGTTTACCAGCAAATAGGACTCGGACCAATTGAAGAAGACACTATTCTT
GTCATAGATCCAAATAATGCTGCAGTACTCCAGTCCAGTGGAAAAAATCTGTTTTACTTGCCACATGGCT
TGAGTATAGATAAAGATGGGAATTATTGGGTCACAGACGTGGCTCTCCATCAGGTGTTCAAACTGGATCC
AAACAATAAAGAAGGCCCTGTATTAATCCTGGGAAGGAGCATGCAACCAGGCAGTGACCAGAATCACTTC
TGTCAACCCACTGATGTGGCTGTGGATCCAGGCACTGGAGCCATTTATGTATCAGATGGTTACTGCAACA
GCAGGATTGTGCAGTTTTCACCAAGTGGAAAGTTCATCACACAGTGGGGAGAAGAGTCTTCAGGGAGCAG
TCCTCTGCCAGGCCAGTTCACTGTTCCTCACAGCTTGGCTCTTGTGCCTCTTTTGGGCCAATTATGTGTG
GCAGACCGGGAAAATGGTCGGATCCAGTGTTTTAAAACTGACACCAAAGAATTTGTGAGAGAGATTAAGC
ATTCATCATTTGGAAGAAATGTATTTGCAATTTCATATATACCAGGCTTGCTCTTTGCAGTGAATGGGAA
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TGCCTGTTGTTCTCATTACAACCCTTCTGGTTATTCCGGTGGTTGTCCTGCTGGCCATTGCCATATTTAT
TCGGTGGAAAAAATCAAGGGCCTTTGGAGCAGATTCTGAACACAAACTCGAGACGAGTTCAGGAAGAGTA
CTGGGAAGATTTAGAGGAAAGGGAAGTGGAGGCTTAAACCTTGGTAATTTCTTTGCAAGCCGTAAGGGCT
ACAGTCGAAAAGGGTTTGACCGGCTTAGCACTGAGGGCAGTGACCAAGAGAAAGAGGATGATGGAAGTGA
ATCAGAAGAGGAGTATTCAGCACCTCTGCCTGCGCTCGCACCTTCCTCCTCCTGA

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_000919 unedited
TGAATTTGTAAATACGAACTTATCTATAGGNNCGGCCGCGCAATTCGGCACGAGGCGCAG
GCTTCGGCTTCCGTCCCGGACAGAGCCCGTGGTCGCGCAGGTTCTGAATGATGACTGACG
CGGGTTTGGGTGATACCCCTCACAGCCCCTGTCATTCCGGAGTCATAAGGCACCCGCGCG
TCTAGCCCCAGCGCCAGGGCACGCGAGCGGCGCTGTGTATGGAGGAAAGCTTCCGCCTGC
GGGCCGGACAAAAGTCCCGCCTGCCCACGGCTTTTTGCCCGCCGCTCGTGACCGAGACGC
CTCGCCGCGGCCAGCTCGCTGCTCTCGCTGGCGGATGGTGTGTGGCCGCCGCAGGACGCC
CGCCGTGCCCGGGCCATGAAGTAGCGGCTGCTGGCGGCGCCGCTGCCCAACCGCCAGCCC
CAGCCCCGCGCTGCGCTGCCCGGTCCTCTCCCGGCGGGGTCGTATCGGCGTGGACATGGC
TGGCCGCGTCCCTAGCCTGCTAGTTCTCCTTGTTTTTCCAAGCAGCTGTTTGGCTTTCCG
AAGCCCACTTTCTGTCTTTAAGAGGTTTAAAGAAACTACCAGACCATTTTCCAATGAATG
TCTTGGTACCACCAGACCCGTAGTTCCTATTGATTCATCAGATTTTGCATTGGATATTCG
CATGCCTGGGGTTACACCTAAACAGTCCGATACATACTTCTGCATGTCTATGCGAATACC
AGTGGATGAGGAAGCCTTCGTGATTGACTTCAAGCCTCGAGCCAGCATGGATACTGTCCA
TCACATGTTACTTTTTGGATGCAATATGCCTTCATCCACTGGNAAGTACTGGGTTTGTGA
TGAAGGAACCTGTACAGATNAAGCCCATATTCTGTATGCCCTGGCGAGAAATGCTNCCCC
TACCCNGCCTCCCACAGTTGTTGNATTCCCAGTTGGNAGGAGAGACCTGGAAGTAATACT
TTGTACTACCAGTACCCTATGGGGAT

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_000919 unedited
NNNNNCCCCCCCNNCCCCCCCCCACNCCTACCCCCTTCCCTTTTGACTCTGGACCGCGGN
NCCGCAACTAGGATCGAGTTTTTTTTTTTTTTTTTAATGGCTCTGAAACACTTTATTAC
ACAAATTACATTCAGATTCTGAAAATAGTGTTCTAACAGTGTAACCATCTAAAAATAAGA
CATCCCAAAAACACACCAACTGAAGAAAATTTAAAAAAGAATTTAAATAGAGACTTTTTT
ATTTCCTTCATTGCAATATAATGTTAGTGATTTTAAAAAAATAGGAGATTTAGCAGCTTT
GTCGTCATGTAGCACAAAGTTTCTCTTTACTGCCACAGGCTAAGAATGCTGAACAGGAAA
GGCACCAAAGAAAGACACTGGCAATGAAAGTGCTATTGGGAAAATACTGTGTTCAAGCAA
AGAATGGGGTTATTTACATCCACCAAAAAGTCTCAAAAGTGTAAATGGGCAAATCTTCCA
TTGTTAGATTAGAATTATGATGGAAAAAGAGGACGGTTTCTCTAGTCTATGTTCATATAA
AGACAATGGCACTGTTATGAACTTTTAGGAAACTCCTCAACTAGAAACAGAAGCCAACTT
AACCAAAACGAAGTAAATAAAGTGTGTACAGTCCCCACACAGACTAGTACAGTTTACAAT
TAAATACACAGAACTCTAAACGTGCTAAAGGGAAAGGAATCTGACATTCTGGGGAAATTT
TACTTAATCTAAATCAAAGCTTGGTTTTTACGAGGAGGAAGGCGCGACCGCAGGCCATAA
GTGCTGAATACTCCTTTTCCTGAATCACTTCCATCATNCCTTTTTCCTCTTGGTCACTGC
CCTCAATGGCTAACCGGGTCAAACCCTTCTTTGAATGTAAACCCTTACCGTTTGCAAAGA
AATTACCAAGGTTTCAAGCCCCCCTTTCCCTTTTCTCCTAATATTTCCCAAAACTCTTTC
CTGAACTTG

Restriction Sites: NotI-NotI

ACCN: NM_000919

Insert Size: 4100 bp

OTI Disclaimer:	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. 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
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. 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_000919.2, NP_000910.2
RefSeq Size:	3960 bp
RefSeq ORF:	2925 bp
Locus ID:	5066
UniProt ID:	P19021
Cytogenetics:	5q21.1
Domains:	Cu2_monoox_C, NHL
Protein Families:	Druggable Genome, Transmembrane

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] Transcript Variant: This variant (1) uses an alternate in-frame splice site in the 3' coding region compared to variant 5. The encoded isoform (a) is longer than isoform e. This isoform (a) may undergo proteolytic processing similar to isoform e. Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.