

## Product datasheet for **RG230597**

### **PAM (NM\_001177306) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	PAM (NM_001177306) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	PAM
Synonyms:	PAL; PHM
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide  
Sequence:

>RG230597 representing NM\_001177306  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**GCGATCGCC**

ATGGCTGGCCGCTCCCTAGCCTGCTAGTTCTCCTTGTTTTTCCAAGCAGCTGTTTGGCTTCCGAAGCC  
CACTTTCTGTCTTTAAGAGGTTTAAAGAACTACCAGACCATTTTCCAATGAATGTCTTGGTACCACCAG  
ACCCGTAGTTCCTATTGATTCATCAGATTTTGCATTGGATATTCGCATGCCTGGGGTTACACCTAAACAG  
TCCGATACATACTTCTGCATGTCTATGCGAATACCAGTGGATGAGGAAGCCTTCGTGATTGACTTCAAGC  
CTCGAGCCAGCATGGATACTGTCCATCACATGTTACTTTTTGGATGCAATATGCCTTCATCCACTGGAAG  
TTACTGGTTTTGTGATGAAGGAACCTGTACAGATAAAGCCAATATTCTGTATGCCTGGGCGAGAAATGCT  
CCCCCTACCCGGCTCCCCAAAGGTGTGGATTAGAGTGGAGGAGAGACTGGAAGTAAATACTTTGTAC  
TACAGGTACACTATGGGGATATTAGTGTCTTTAGAGATAATAACAAGGACTGTTCTGGTGTCTTACA  
CCTCACACGTCTGCCACAGCCTTAATTGCTGGCATGTACCTTATGATGTCTGTTGACACTGTTATCCCA  
GCAGGAGAAAAAGTGGTGAATTCGACATTTTCATGCCATTATAAAAAATTCCAATGCATGTCTTTGCCCT  
ATAGAGTTCACACTCACCATTTAGGTAAGGTAGTAAGTGGATACAGAGTAAGAAATGGACAGTGGACACT  
GATTGGACGGCAGAGCCCTCAGCTGCCACAGGCTTCTACCCTGTGGGGCATCCAGTTGATGTAAGTTTT  
GGTGACCTACTGGCTGCAAGATGTGATTCACTGGTGAAGGAAGGACAGAAGCCACACACATTGGTGGCA  
CGTCTAGTGATGAAATGTGCACTTATACATTATGATTACATGGAAGCCAAGCATGCAGTTTCTTTTCAT  
GACCTGTACCCAGAATGTAGTCCAGATATGTTGAGAACCATACCACCAGAGGCCAACATCCAATTCCC  
GTGAAGTCTGATATGTTTATGATGCATGAACATCATAAAGAAACAGAATATAAAGATAAGATTCTTTTAC  
TACAGCAGCCAAAACGAGAAGAAGAAGTGTAGACCAGGGTATTCTATTCACTACTTTTCCAAGCT  
GCTAGGAGAAAAGGGAAGATGTTGTTTCATGTGCACAAATAAATCCTACAGAAAAGGCAGAATCAGAGTCA  
GACCTGGTAGCTGAGATTGCAAATGTAGTCCAAAAAAGGATCTTGGTGCATCTGATGCCAGAGAGGGTG  
CAGAACATGAGAGGGGTAATGCTATTCTTGTGAGAGACAGAATTCACAAATTCACAGACTAGTATCTAC  
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AAACAATAAAGAAGGCCCTGTATTAATCCTGGGAAGGAGCATGCAACCAGGCAGTGACCAGAATCACTTC  
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GCAGACCCGGGAAAATGGTCGGATCCAGTGTAAAACTGACACCAAAGAATTTGTGAGAGAGATTAAGC  
ATTCATCATTTGGAAGAAATGATTTGCAATTTATATACCAGGCTTGCTCTTTGCAGTGAATGGGAA  
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TAAAAAGGCTGGCATTGAGGTCCAGGAAATCAAAGAAGCCGAGGCAGTGTGAAACCAAATGGAGAAC  
AAACCCACCTCCTCAGAAATGCAGAAGATGCAAGAGAAACAGAACTGATCAAAGAGCCAGGCTCGGGAG  
TGCCTGTTGTTCTCATTACAACCCTTCTGGTATTCCGGTGGTGTCTGCTGGCCATTGCCATATTTAT  
TCGGTGGAAAAATCAAGGGCTTTGGAGATTCTGAACACAACTCGAGACGAGTTCAGGAAGAGTACTG  
GGAAGATTTAGAGGAAAGGGAAGTGGAGGCTTAAACCTTGGTAATTTCTTTGCAAGCCGTAAAGGGCTACA  
GTCGAAAAGGTTTACCAGGCTTACACTGAGGGCAGTGACCAAGAGAAAGAGGATGATGGAAGTGAATC  
AGAAGAGGAGTATTCAGCACCTCTGCCTGCGCTCGCACCTTCTCTCTCC

**ACGCGT**ACGCGGCCGCTCGAG – GFP Tag – GTTTAA

**Protein Sequence:** >RG230597 representing NM\_001177306  
 Red=Cloning site Green=Tags(s)

MAGRVPSLLVLLVFPSSCLAFRSPLSVFKRFKETTRPFSNECLGTTTRPVVPIIDSSDFALDIRMPGVTPKQ  
 SDTYFCMSMRIPVDEEAFVIDFKPRASMDTVHHMLLFGCNMPSSTGSYWFCEGTCTDKANILYAWARNA  
 PPTRLPGKGVGFRVGGETGSKYFVLQVHYGDISAFRDNNKDCSGVSLHLTRLPQPLIAGMYLMMSVDTVIP  
 AGEKVVNSDISCHYKNYPMHVFAIRVHTHHLGKVVSGYVRNGQWTLIGRQSPQLPQAFYPVGHVVDVSF  
 GDLLAARCVFTGEGRTEATHIGGTSSDEMCLYIMYYEAKHAVSFMTCTQNVAPDMFRTIPPEANIPIP  
 YKSDMVMMEHHKETEYKDKIPLLQQPKREEEVLDQGDYFSLLSKLLGEREDVVHVHKYNPTEKAESES  
 DLVAEIANVVQKDLGRSDAREGAHERGNAILVRDRIHKFHRLVSTLRPPESRVFSLQQPPPGEGTWEP  
 EHTGDFHMEALDWPVYLLPGQVSGVALDPKNNLVIFHRGDHVWDGNSFDSKFVYQQIGLPIEEDTIL  
 VIDPNNAVLQSSGKNLFYLPHGLSIDKDGNYWVDVALHQVFKLDPNNKEGPVLIILGRSMQPGSDQNH  
 CQPTDVAVDPGTGAIYVSDGYCNSRIVQFSPSGKFITQWGEESGSSPLPGQFTVPHSLALVPLLGQLCV  
 ADRENGRIQCFTDTKEFVREIKHSSFGRNVFAISYIPGLLFAVNGKPHFGDQEPVQGFVMNFNGEIID  
 IFKPVRKHFDMPHDIVASEDGTVYIGDAHTNTVWKFTL TEKLEHRSVKKAGIEVQEIKEAEAVVETKMEN  
 KPTSSSELQKMQEKQLIKEPGSGVPVLLITLLVIPVVLLAIAIFIRWKKSRAGDSEHKLETSSGRVL  
 GRFRGKSGGLNLGNFFASRKGYSRKGFDRLSTEGSDQEKEDDGSESEEEYSAPLPALAPSSS

TRTRPLE – GFP Tag – V

**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**

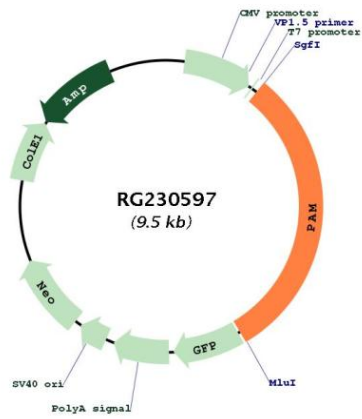


**ACCN:** NM\_001177306

**ORF Size:** 2919 bp

<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_001177306.1</a> , <a href="#">NP_001170777.1</a>
<b>RefSeq Size:</b>	5356 bp
<b>RefSeq ORF:</b>	2922 bp
<b>Locus ID:</b>	5066
<b>UniProt ID:</b>	<a href="#">P19021</a>
<b>Cytogenetics:</b>	5q21.1
<b>Protein Families:</b>	Druggable Genome, Transmembrane
<b>Gene Summary:</b>	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 RG230597