

## Product datasheet for **TP302074L**

### **PAM (NM\_138821) Human Recombinant Protein**

#### **Product data:**

**Product Type:** Recombinant Proteins

**Description:** Recombinant protein of human peptidylglycine alpha-amidating monooxygenase (PAM), transcript variant 3, 1 mg

**Species:** Human

**Expression Host:** HEK293T

**Expression cDNA Clone or AA Sequence:** >RC202074 protein sequence  
**Red**=Cloning site **Green**=Tags(s)

MAGRVPSSLVLLVFPSSCLAFRSPLSVFKRFKETTRPFSNECLGTRPVWPIDSSDFALDIRMPGVTPKQ  
SDTYFCMSMRIPVDEEAFVIDFKPRASMDTVHHMLLFGCNMPSSGTYWFCDEGTCTDKANILYAWARNA  
PPTRLPKGVGFRVGGGETGSKYFVLQVHYGDISAFRDNNKDCSGVSLHLTRLPQPLIAGMYLMMMSVDVIP  
AGEKVVNSDISCHYKNYPMHVFAYRVHTHHLGKVVSGYRVRNGQWTLIGRQSPQLPQAFYPVGHVPDVSF  
GDLLAARCVFTGEGRTEATHIGGTSSDEMKNLYIMYYMEAKHAVSFMTCTQNVAPDMFRTIPPEANIPI  
VKSDMVMMEHHKETEYKDKIPLLQPKREEEVLDQDFHMEEALDWPGVYLLPGQVSGVALDPKNNLVI  
FHRGDHVWDGNSFDSKFVYQQIGLGP I EEDTILVIDPNNAAVLQSSGKNLFYLPGLSIDKDGNVWVTDV  
ALHQVFKLDPNNKEGPVLLGRSMQPGSDQNHFCQPTDVAVDPGTGAIYVSDGYCNSRIVQFSPSGKFIT  
QWGEESGSSPLPGQFTVPHSLALVPLLGLQCVADRENGRIQCFTDTKEFVREIKHSSFGRNVFAISYI  
PGLLFAVNGKPHFGDQEPVQGFVMNFSNGEIIDIFKPVKHFDMPHDIVASEDGTVYIGDAHTNTVWKFT  
LTEKLEHRSVKKAGIEVQEIKEAEAVVETKMENKPTSELQKMQEKKLIKEPGSGVPVLLITLLVIPV  
VLLAIAIFIRWKKSRAFGDSEHKLETSSGRVLRFRGKGSGLNLGNFFASRKGYSRKGFDRLSTEGSD  
QEKEDDGSESEEEYSAPLPALAPSSS

**TRTRPLEQKLISEEDLAANDILDYKDDDDKV**

**Tag:** C-Myc/DDK

**Predicted MW:** 94.2 kDa

**Concentration:** >0.05 µg/µL as determined by microplate BCA method

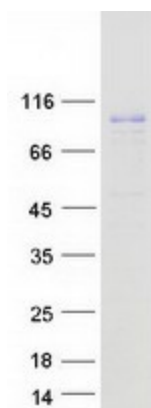
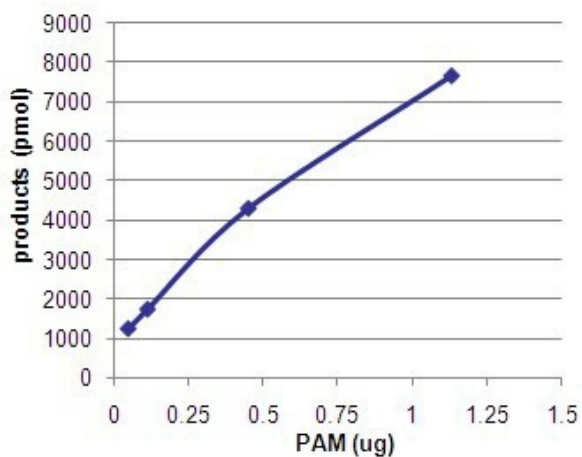
**Purity:** > 80% as determined by SDS-PAGE and Coomassie blue staining

**Buffer:** 25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol



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|--------------------------|--|
| <b>Bioactivity:</b>      | The specific activity of PAM was determined by measuring the product D-Tyr-Val-NH <sub>2</sub> formation from a conversion of D-Tyr-Val-Gly. The reaction was carried out at 37C for 60min in the buffer containing 50 mM MES, pH6.0, 1 μM CuCl <sub>2</sub> , 2000 units/ml of Catalase, 5 mM L-ascorbic acid, and 50 uM of D-Tyr-Val-Gly as the substrate  |
| <b>Preparation:</b>      | Recombinant protein was captured through anti-DDK affinity column followed by conventional chromatography steps.   |
| <b>Note:</b>             | For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.   |
| <b>Storage:</b>          | Store at -80°C.  |
| <b>Stability:</b>        | Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.  |
| <b>RefSeq:</b>           | <a href="#">NP_620176</a>  |
| <b>Locus ID:</b>         | 5066   |
| <b>UniProt ID:</b>       | <a href="#">P19021</a>   |
| <b>RefSeq Size:</b>      | 5035   |
| <b>Cytogenetics:</b>     | 5q21.1   |
| <b>RefSeq ORF:</b>       | 2598   |
| <b>Synonyms:</b>         | PAL; PHM   |
| <b>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] |
| <b>Protein Families:</b> | Druggable Genome, Transmembrane  |

**Product images:**

Coomassie blue staining of purified PAM protein (Cat# [TP302074]). The protein was produced from HEK293T cells transfected with PAM cDNA clone (Cat# [RC202074]) using MegaTran 2.0 (Cat# [TT210002]).