

## Product datasheet for TP523751

### Pam (NM\_013626) Mouse Recombinant Protein

#### Product data:

Product Type:	Recombinant Proteins
Description:	Purified recombinant protein of Mouse peptidylglycine alpha-amidating monooxygenase (Pam), with C-terminal MYC/DDK tag, expressed in HEK293T cells, 20ug
Species:	Mouse
Expression Host:	HEK293T
Expression cDNA Clone or AA Sequence:	>MR223751 representing NM_013626 Red=Cloning site Green=Tags(s)

MAGRARSRLLLLGLLALQSSCLAFRSPLSVFKRFKETTTRSFNECLGTTTRPITPIDSSDFTLDIRMPGV  
TPKESDITYFCMSMRLPVDEEAFVIDFKPRASMDTVHHMLLFGCNMPSSTGSYWFCEGTCTDKANILYAW  
ARNAPPTRLPKGVGFRVGGGETGSKYFVLQVHYGDISAFRDNHKDCSGVSLHLTRVPQPLIAGMYLMMSVN  
TVIPPGEKVVNSDISCHYKMYPMHVFAYRVHHTHLGKVVSGYRVRNGQWTLIGRQSPQLPQAFYPVEHPV  
DVAFGDILAARCVFTGEGRTEATHIGGTSSDEMONLYIMYYMEAKHAVSFMTCTQNVAPDMFRTIPEEAN  
IPIPVKSDMVMIHGHHKETENKEKSALIQQPKQGEEEAFFEQGDFYSLLSKLLGEREDVVHVHKNPTEKT  
ESGSDLVAEIANVVQKKDLGRSDAREGAEHEEGNAILVRDRIHKFHRLESTLRPAESRALSFQQPGEGP  
WEPELAGDFHVEEALEWPGVYLLPGQVSGVALDSKNNLVIFHRGDHVWDGNSFDSKFVYQQRGLGPIEED  
TILVIDPNKAEILQSSGKNLFYLPGLSIDTDGNYWVTDVALHQVFKLEPRSEKGPLLVLGRSMQPGSDQ  
NHFCQPTDVAVEPSTGAVFVSDGYCNSRIVQFSPSGKFITQWGEESGSSPKPGQFVPHSLALVPHLNQ  
LCVADRENGRIQCFTDTEKFVREIKHASFRNVFAISYIPGFLFAVNGKPYFGDQEPVQGFVMNFSSGE  
IIDVFKPVRKHFDMPHDIVASEDGTVYIGDAHTNTWKFLLTESRLEVEHRSVKKAGIEVPEIKAEAVVE  
PKVKNKPTSSELQKMQEKKLIKDPGSGVPVLLITLLVIPVVLLAIAMFIRWKKSRAFGDHDKLESS  
SGRVLGRLRGKGSGLNLGNFFASRKGYSRKGFDREVSTEGSDQEKDEDDGSESEEEYSAPLPTPAPSS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag:	C-MYC/DDK
Predicted MW:	109.3 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>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 after receiving vials.
<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_038654</a>
<b>Locus ID:</b>	18484
<b>UniProt ID:</b>	<a href="#">P97467</a> , <a href="#">F8VQA4</a> , <a href="#">A1L331</a>
<b>RefSeq Size:</b>	4149
<b>Cytogenetics:</b>	1 47.76 cM
<b>RefSeq ORF:</b>	2934
<b>Synonyms:</b>	PHM
<b>Summary:</b>	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 monooxygenase (PHM) domain, is the copper-, ascorbate-, and O <sub>2</sub> - 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]