

## Product datasheet for **RG215960**

### **PAPP A2 (PAPPA2) (NM\_020318) Human Tagged ORF Clone**

#### Product data:

Product Type:	Expression Plasmids
Product Name:	PAPP A2 (PAPPA2) (NM_020318) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	PAPPA2
Synonyms:	PAPP-A2; PAPP-E; PAPPE; PLAC3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG215960 representing NM_020318 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGATGTGCTTAAAGATCCTAAGAATAAGCCTGGCGATTTGGCTGGTGGGCACTCTGTTCTGCCAACT  
CTGAGCTGGGCTGGACACGCAAGAAATCCTTGGTTGAGAGGGAACACCTGAATCAGGTGCTGTTGGAAGG  
AGAACGTTGTTGGCTGGGGGCCAAGGTTCAAGACCCAGAGCTTCTCCACAGCATCACCTCTTTGGAGTC  
TACCCAGCAGGGCTGGAACTACCTAAGGCCCTACCCCGTGGGGAGCAAGAAATCCATCATACAGGAC  
GCAGCAAACAGACACTGAAGGAAATGCTGTGAGCCTTGTCCCCAGACCTGACTGAAAATCCAGCAGG  
ACTGAGGGGTGCAGTTGAAGAGCCGGCTGCCCATGGGTAGGGGATAGTCCTATTGGGCAATCTGAGCTG  
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AAGGCTCAGCCATGGCTGCCACTACTACCACCGCCATTTTCAACCCCTGAACGAACCCAAACAGAGAC  
CCAAAGGAGGGGCTGGCCAAAGTCCAGGCAGCGTCGCCAAGTGTGGAAGAGGGCGGGCGGAAGATGGGCAG  
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CTGTGCGCTTTGCAGCCCCACTCTGTGGGCAAACAGTCTGTGACAATGTGGAATTGATCTCCCAGTACA  
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 CTAAGAGGGCCTGTGGACCCAGGAGTTTAAAGTTGTGTGAGAACTGCAAGGAGAATGCCACCACCCCTC  
 CTCAGAGCTGAATTTCTGTGGAGTACAAATGTGAACAAGGATATGGGATTGGTGCAGTGTGTTCCCATTTG  
 TGTGAATCCCCCAGTGACCCCGTATGCTACTGAGAATATCACTGCTGACACTCTGGAGCACTGGA

TGGAACCTGTCAAAGTCCAGAGCATTGTGTGACTGGCCGGCGTCAATGGCACCCAGACCCCGTCTTAGT  
 CCACTGCATCCAGTCATGTGAGCCCTTCCAAGCAGATGGTTGGTGTGACACTATCAACAACCGAGCCTAC  
 TGCCACTATGACGGGGGAGACTGCTGCTTCCACACTCTCTCCAAGAAGGTCATTCCATTTGCTGCTG  
 ACTGTGACCTGGATGAGTGCACCTGCCGGGACCCAAGGCAGAAGAAAATCAG

ACGCGTACGCGGGCCGCTCGAG – GFP Tag – GTTTAA

**Protein Sequence:**

>RG215960 representing NM\_020318  
 Red=Cloning site Green=Tags(s)

MMCLKILRISLAILAGWALCSANSELGWTRKKSVEREHLNQVLEGERCWLGAQVRRPRASPQHHLFGV  
 YPSRAGNYLRYPVGEQEIHHTGRSKPDTEGNAVSLVPPDLTENPAGLRGAVEEPAAPWVGDSPIGQSEL  
 LGDDDAYLGNQRSKESLGEAGIQKGSAMAATTTAIFTTLNEPKPETQRRGWAKSRQRRQVWKRRAEDGQ  
 GDSGISSHFQPWPKHSLKHRVKKSPPEESNQNGGEGSYREAETFNSQVGLPILYFSGRRERLLLRPEVLA  
 EIPREAFVEAWVKPEGQNNPAIIAGVFDNCSHTVSDKGWALGIRSGKDKGRDARFFSLCTDRVYKKA  
 TILISHSRYQPGTWHVAATYDGRHMALYVDGTQVASSLDQSGPLNSPFMASCRLLLGGDSSEEDGHYFR  
 GHLGTLVFWSTALPQSHFQHSSQHSSGEEETDLVLTASFEPVNTWVWPFDEKYPRLVLEQGFEPPEI  
 LSPLQPPLCGQTVCDNVELISQYNGYWPLRGEKVIRYQVVICDDEGLNPIVSEEQIRLQHEALNEAFSR  
 YNISWQLSVHQVHNSTLRHRVVLVNCEPSKIGNDHCDPECEHPLTGYDGGDCRLQGRCSWNRRDGLCHV  
 ECNMLNDFDDGDCDPQVADVKTCTFDPDSPKRAYMSVKELKEALQLNSTHFLNIYFASSVREDLAGAA  
 TWPWDKDAVTHLGGIVLSPAYYMPGHTDTMIHEVGHVGLYHVFKGVSERESCNDPCKETVPSMETGDL  
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 RKPTPIPIPPMVIQGTNKSLTIHWLPPISGVVYDRASGSLCGACTEDGTFRQYVHTASSRRVCDSSGYWT  
 PEEAVGPPDQVQCEPSLQAWSPEVHLHYMMNTVPCPTEGCSLELLFQHPVQADTLTLWVTSFFMESSQV  
 LFDTEILLENKESVHLGPLDTFCDIPLTIKLVHDGKVSQVYVTFDERIEIDAALLTSQPHSPLCSGCRP  
 VRYQVLRDPPFASGLPVVVTHSHRKFDTVEVTPGQMYQYVLAEAGGELGEASPLNHIHGAPYCGDGKV  
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 DEVWLKVCFNRPGEARAIFFLTTDGLVPGHQPTVTLVLTVDVRSNHSGLTYGLSCQHNLIIINVTHH  
 QNVLFHHTTSVLLNFSPPRVGISAVALRTSSRIGLSAPSNCISEDEGQNHQGSQIHRPCGKQDSCPSLL  
 LDHADVVNCTSIGPGLMKCAITCQRGFALQASSGQYIRPMQKEILLTCSSGHWDQNVSCLPVDCGVPDPS  
 LVNYANFSCSEGTKFLKRCISCVPPAKLQGLSPWLTCLLEDGLWSLPEVYCKLECDAPPIILNANLLLPH  
 CLQDNHDVGTICKYECKPGYYVAESAEGKVRNKLKIQCLEGGIWEQGSQIPVVCEPPPPVFEGMYECTN  
 GFSLDSQCVLNCNQEREKLPILCTKEGLWTQEFKLCENLQGECPPPPSELNSVEYKCEQGYGIGAVCSPL  
 CVIPPSDPVMLPENITADTLEHWMPEVKVQSIIVCTGRRQWHPDPVLVHCISCEPFQADGWCDTINNRAY  
 CHYDGGDCSSTLSSKKVIPFAADCDLDECTCRDPKAEENQ

TRTRPLE – GFP Tag – V

**Restriction Sites:**

SgfI-MluI



<b>ACCN:</b>	NM_020318
<b>ORF Size:</b>	5373 bp
<b>OTI Disclaimer:</b>	<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 <a href="mailto:custsupport@origene.com">custsupport@origene.com</a> 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. <a href="#">More info</a></p>
<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_020318.3</a>
<b>RefSeq Size:</b>	6940 bp
<b>RefSeq ORF:</b>	5376 bp
<b>Locus ID:</b>	60676
<b>UniProt ID:</b>	<a href="#">Q9BXP8</a>
<b>Cytogenetics:</b>	1q25.2
<b>Protein Families:</b>	Protease, Secreted Protein
<b>Gene Summary:</b>	This gene encodes a member of the pappalysin family of metzincin metalloproteinases. The encoded protein cleaves insulin-like growth factor-binding protein 5 and is thought to be a local regulator of insulin-like growth factor (IGF) bioavailability. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jul 2010]