

Product datasheet for **RG221783**

PAG3 (ASAP2) (NM_003887) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PAG3 (ASAP2) (NM_003887) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	PAG3
Synonyms:	AMAP2; CENTB3; DDEF2; PAG3; PAP; Pap-alpha; SHAG1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG221783 representing NM_003887 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCCGGACCAGATCTCCGTGTCCGAATTCGTGGCCGAGACCCATGAGGACTACAAGGGCCACGGCCT
CCAGCTTACCACCCGCACGGCGCAGTGCCGGAACACTGTGGCGCCATCGAGGAGGCTTTGGACGTGGA
CCGGATGGTTCTTACAAAATGAAGAAATCCGTGAAAGCAATCAACAGCTCTGGGCTGGCTCACGTGAA
AATGAAGAGCAGTACACCAGGCTCTGGAGAAGTTTGGCGCAACTGTGTATGCAGAGATGACCCAGATT
TAGGAAGTGCCTCCTGAAGTTCTCAGTGTTCACAAAGGAGTTGACAGCACTTTTCAAAAACCTGATTCA
GAATATGAACAACATAATCTCCTTCCCTTTGGACAGTTTCTGTAAGGGGACCTGAAAGGAGTGAAGGG
GATCTGAAAAAGCCTTTTGATAAAGCTTGGAAAGACTATGAAACAAAAATAACCAAGATAGAAAAGGAGA
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AAAAAGGGAGTAGATTTACTTCAGAATCTGATCAAATACTTTTCATGCCAATGCAATTTTTTTTTCAGGATG
GACTCAAAGCCGTGGAAGCCTCAAACCTTCCATTGAAACGCTGTCTACGGATCTTACACAGATCAAACA
GGCCCAGGATGAAGAAAGAAGGCAGTTGATACAGCTTCGAGATATTTTGAATCCGCATTGCAGGTTGAA
CAGAAAGAGTCTAGGAGAGACTCCCAAATTCGTGAGAGCAGCTTATAGCTTACATCAGCCTCAGGGAA
ACAAGGAACATGGGACCGAGCGGAACGGCAGCCTTACAAGAAGAGTGACGGGATCCGAAAAGTGTGGCA
GAAAAGGAAATGTTTCAGTTAAAAATGGTTTTCTGACCATATCCCATGGTACCGCTAACCGCCTCCTGCA
AAGCTCAACCTGCTAACCTGCCAGTGAAGACCAACCCTGAGGAGAAGAAGTGTCTTACCTTATTTTAC
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CGCCAGATCCTACATGGCTTTCCACCACTGGGCATCCTGACCTGCATCGAGTGTCCGGAATCCACCG
AGAGCTGGGGTTCATTATCCAGGATGCAGTCCCTGACCTTAGATGTACTGGGAACATCTGAGCTGCTG



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CTCGCCAAGAATATTGGGAATGCAGGCTTAAATGAGATCATGGAATGTTGCCTACCAGCTGAGGACTCAG
TCAAACCAACCCAGGCAGCGACATGAATGCAAGAAAGGACTACATCACAGCCAAGTACATCGAGAGGAG
ATACGCAAGGAAGAAGCACGCGGATAACGCGGCGAAGCTTACAGTCTTTGCGAGGCCGTCAAACGAGA
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TGCTGCCGTGACCGACAATGCCGAGTGCCCAAGTTGCTCCTGCGGGGAAGGCCTCCATCGAGATAGCAA
ACGAGTCAGGAGAGACTCCGCTGGACATTGCCAAGCGCCTCAAGCACGAGCACTGTGAGGAGCTGCTGAC
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TCAGTCTTACCAGCTGGGCTCCAACAGCTTCACTAACGCTGTATCTTTGGCCAGAGATGCTGCAAA
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GCCAGCCGAGCAAGCCTGCCCGCCTGGGATCTCACAGATCAGGCCCCACCTCTGCCCCACAGCCGCC
CAGCCGCCTCCCGCAGAAGAAGCCTGCGCCGGGGCTGACAAGTCCACCCACTGACCAACAAAGGCCAA
CCGAGAGGACCTGTGGATCTCTCTGCAACGGAAGCTCTGGGTCTCTGTCCAATGCTATGGTCTGCAGC
CCCCTGCACCCATGCCTAGGAAGTCGACAGGCAACCAAGTTGAAGCCTAAGCGGGTAAAGCGCTCTATA
CTGTGTGGCTGACAACCCGATGAGTCCACCTTCTCCGAGGGGATGTGATCATCGTGGACGGGAGGAG
GACCAGGAGTGGTGGATTGGCCACATTGATGGAGATCTGGTTCGCAAAGGCGCATTCCCGGTGTCATTG
TGCACTTTATCGCTGAC

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>RG221783 representing NM_003887
Red=Cloning site Green=Tags(s)

MPDQISVSEFVAETHEDYKAPTASSFTTRTAQCRNTVAIEEALDVMVLYKMKKSVKAINSSGLAHVE
NEEQYTQALEKFGNCVCRDDPDLGSAFLKFSVFTKELTALFKNLIQNMNNIISFPLDSLKGDLDKGVKG
DLKKPFDKAWKDYETKIKIEKEKHEHAKLHGMIRTEISGAEIAEEMEKERRFFQLQMCEYLLKVNEIKI
KKGVDLLQNLIKYFHAQC�NFQDGLKAVESLKPSIETLSTDLHTIKQAQDEERRQLIQLRDILKSALQVE
QKESRRDSQIRQSTAYSLSHQPNKEHGTERNGSLYKSDGIRKVVQKRKCSVKNGFLTISHGTANRPPA
KLNLLTCQVKTNPEEKCFDLISHDRTYHFQAEDQEQIWMVLSQNSKEEALNNAFKGDDNTGENNIVQ
ELTKEIISEVQRMGTNDVCCDCGAPDPTWLSTNLGILTCIECSGIHRELGVHYSRMQSLTLDVLTSELL
LAKNIGNAGFNEIMECCLPÆDSVKPNPGSDMNARKDYITAKYIERRYARKKHADNAAKLHSLCEAVKTR
DIFGLLQAYADGVDLTEKIPLANGHEPDETALHLAVRSVDRTSLHIVDFLVQNSGNLDKQTKGKSTALHY
CCLTDNAECLKLLLRGKASIEIANESGETPLDIAKRLKHEHCEELLTQALSGRFNSHVHVEYEWRLLED
LDESDDDMDEKLQSPNRRDRPISFYQLGSNQLQSNVSLARDAANLAKEKQRAFMPISILQNETYGALL
SGSPPPAQPAAPSTTSAPPLPPRNVGKVQTASSANTLWKTNSVSVDDGSRQRSSDPPAVHPPLPPLRVT
STNPLTPPPPVAKTPSVMEALSQPSKPAPPGISQIRPPPLPPQPPSRLPQKPPAGADKSTPLTNKGQ
PRGPVDLSATEALGPLSNAMVLQPPAMPKRSQATKLPKRVKALYNVADNPDELTFSEGVDIIVDGE
DQEWIGHIDGDPGRKGAFPVSFVHFIAID

TRTRPLE – GFP Tag – V

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:


ACCN: NM_003887

ORF Size: 3027 bp

OTI Disclaimer: 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](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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:

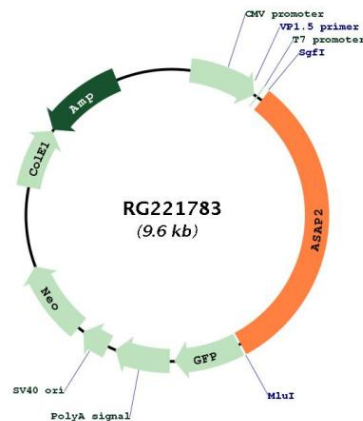
1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store 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_003887.1](#), [NP_003878.1](#)

RefSeq Size: 5711 bp

RefSeq ORF:	3021 bp
Locus ID:	8853
UniProt ID:	<u>O43150</u>
Cytogenetics:	2p24
Domains:	ArfGap, SH3, PH, ANK
Protein Pathways:	Endocytosis, Fc gamma R-mediated phagocytosis
Gene Summary:	<p>This gene encodes a multidomain protein containing an N-terminal alpha-helical region with a coiled-coil motif, followed by a pleckstrin homology (PH) domain, an Arf-GAP domain, an ankyrin homology region, a proline-rich region, and a C-terminal Src homology 3 (SH3) domain. The protein localizes in the Golgi apparatus and at the plasma membrane, where it colocalizes with protein tyrosine kinase 2-beta (PYK2). The encoded protein forms a stable complex with PYK2 in vivo. This interaction appears to be mediated by binding of its SH3 domain to the C-terminal proline-rich domain of PYK2. The encoded protein is tyrosine phosphorylated by activated PYK2. It has catalytic activity for class I and II ArfGAPs in vitro, and can bind the class III Arf ARF6 without immediate GAP activity. The encoded protein is believed to function as an ARF GAP that controls ARF-mediated vesicle budding when recruited to Golgi membranes. In addition, it functions as a substrate and downstream target for PYK2 and SRC, a pathway that may be involved in the regulation of vesicular transport. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Sep 2008]</p>

Product images:



Circular map for RG221783