

Product datasheet for **RC205822**

PGAP6 (NM_021259) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PGAP6 (NM_021259) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PGAP6
Synonyms:	GPI-PLA2; M83; TMEM6; TMEM8; TMEM8A
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide
Sequence:**

>RC205822 ORF sequence

Red=Cloning site Blue=ORF Green=Tags(s)

 TTTTGAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGC**

ATGGGCCGGGCTGGCACCAGGACCGGGGCGAGGCGGTGGCCGCGGTGGTGGCGGGCGCTGCTGCTGC
 TGTGCTTGCCCCGCCCCCGCTGCCTCCGCGGCTACAGCGGAAGAGCGAGGTGGGGCTGGTGTCCGA
 GCACTTCTCACAGGCCCCGAGAGGCTGTCTTCTACAGCTGGTATGGCAGTGCCAGGCTCTTCCGCTTC
 CGCGTGCCCCAGATGCTGTGCTTCTACGCTGGCTCCTGCAGGTCTCCCGGAGAGCGGCGCTGCCTGCA
 CCGACGCGGAGATCACCGTGCACCTCCGTTCCGGCGCCCCCTCCGGTCATCAACCCGCTGGCACCAGCTT
 CCCGGACGACACCGCGGTGCAGCCCTCCTTCCAGGTGGGGTGGCGTGAGCACCACCGAGAGAAGCAAT
 GCCTCCGTCAACGTTTCCACCCGGCCCCCGGGACTGGTTCGTGGCGCCACCTGCCCCCTCATCCC
 AGAAGATCGAGTTGAAGGGCTTGGCTCCACCTGTGCCTACGTCTTCCAGCCTGAAGTGTGGTCACGCG
 GGTGGTCGAGATTCCATCATGGAGCCGACGTGCCCCCTCCTCAGACCCTCCTCTCCATCCCAGCTAC
 CTCAAGGTCTTTGTCGCCGATTACACGCGGGAGCTTCTGCTGGAGCTGCGGGACTGCGTGTCCAATGGGA
 GCCTGGGCTGCCCGTGCGTCTACCGTGGGCCCGGTACCCCTGCCTAGCAACTTCCAGAAGGTGCTCAC
 CTGCACCGGTGCCCCCTGGCCCTGCCGCTGCTGCTGCCCTACCGCCCTGGGACCGGTGGTGCAGTG
 ACAGCTGAGAGCTGGTGGGGCCCTCGGGACAGTGGCTTTCAGTGCTGTAGTGCCCTCACAGCTTGCA
 GGCCACGAGCGTGACCGTCCAGCCCCCTTCTGCAGAGCAGCAAAACAGAGCTTCAATGCCTCCTCTGG
 TCTGCTGTCCCCGAGCCCCGACCACAGGACCTGGGCAGGAGTGGCAGGGTGGACCGCAGCCCCCTTCTGC
 CTCACAACTACCCAGTCACGCGGGAGGACATGGACGTGGTGTGGTGCACCTTCCAGCCCTGGACAGGG
 TCTCGGTGAGGGTGTGTTCCGACACGCCCTCCGTGATGCGGCTGCGCCTGAACACCGGCATGGACAGCGG
 GGGTTCCTCACCATCTCCCTGCGGGCCAACAAGACAGAGATGCGGAACGAGACCGTCGTAGTGGCCTGC
 GTGAATGCTGCCTCGCCCTTCTTGGCTTCAATACTTCGCTCAACTGCACACAGCCTTCTTCCAGGGCT
 ACCCTTTGTCTCTGAGCGCTGGTCTCGCAGGGCCAACCTCATCATCCCCTACCCAGAGACAGACAAGTG
 GTACCTCTCCCTGCAGCTCATGTGCCCTGAGAATGCTGAGGACTGTGAGCAGGCTGTGGTCCACGTGGAG
 ACCACCTTGACCTGGTGCCCTGTTTGAACGATTGTGGACCTATGGCCAGTGCCCTCCTGCTCCGACAG
 ACAGCTACCTGTATGCCAGCTGCAGCTGCAAGGCAGGCTGGCGTGGTGGAGCTGCACGGACAACAGCAC
 AGCCCAGACGGTGGCCAGCAGAGGGCGGCCACACTGCTGCTCACGCTCAGCAACCTCATGTTCTTGCC
 CCCATCGCCGTCTCAGTGGCGGATTCTTCTGTTGGAGGCTCCGTCTACGCTACACCATGTTCTTCT
 CCACGTTCTACCACGCTGCGACCGAGCCCGGGGAGGCGGTGCTGTGCATCCTCAGCTACGACACGCTGCA
 GTACTGCGACTTCTTGGGCTCCGGGCGGCCATCTGGGTACCATCCTGTGCATGGCAGGCTCAAGACA
 GTCTGAAATACGTGCTGTTTCTTCTGGGTACACTGGTATCGCCATGTCCTTGACGCTGGACCGCAGGG
 GCATGTGGAACATGCTGGGGCCCTGCCTCTTGCCTTCGTGATCATGGCTCCATGTGGGCTTACCGCTG
 CGGGCACCGGCGCCAGTGCTACCCACCTCGTGGCAGCGCTGGGCTTCTACCTCCTGCCCGGCTCTCT
 ATGGCCTCTGTGGGCATCGCCATCTACACCTCCATGATGACTAGCGACAAGTACTACTACACCCACAGCA
 TCTGGCACATCCTGCTGGCCGGGAGCGCAGCCTTGCTGCTGCCGCCACCTGACGAGCCCGCGAGCCCTG
 GGCCTGCTCGCAGAAATCCCCTGCCACTATCAGATCTGCAAGAACGATCGGGAGGAAGTGTACGCAAGT
 ACG

ACGCGTACGCGGCGGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC205822 protein sequence
 Red=Cloning site Green=Tags(s)

MGRAGTGTGGEAAVAVAGPLLLLLLARPPPASAGYSGKSEVGLVSEHFSQAPQRLSFYSWYGSARLFRF
 RVPPDAVLLRWLLQVSRESGAACDAEITVHFRSGAPPVINPLGTSFPDDTAVQPSFQVGVPSTAPRSN
 ASVNVSHAPAGDWFVAAHLPSSQKIELKGLAPTCAYVFQPELLVTRVVEISIMEPDVPLPQTLLSHPSY
 LKVFVPDYTRELLLELRDCVSNGLGCPVRLTVGPVTLPSNFQKVLCTGAPWPCRLLLPSPPWDRWLQV
 TAESLVGPLGTVAFSAVAALTACRPRSVTVQPLLQSSQNQSFNASSGLLSPSPDHQDLGRSGRVDRSPFC
 LTNYPVTREDMDVVSVHFQPLDRVSVRVCSDTPSVMRLRLNTGMDSGGSLTISLRANKTEMRNETVVVAC
 VNAASPFLGFNTSLNCTTAFFQGYPLSLSAWSRRANLIIPYPETDNWYLSLQLMCPENAEDCEQAVVHVE
 TTLYLVPCLNDCGPYGQCLLLRHSYLYASCCKAGWRGWSCDNTAQTVAQQRAATLLLLTLNLMFLA
 PIAVSRRFFLVEASVYAYTMFFSTFYHACDQPGEAVLCILSYDTLQYCDFLGSGAAIWVILCMARLKT
 VLKYVLFLLGTLVIAMSLQLDRRGMWNMLGPCLFAFVIMASMWAYRCGHRRCYPTSWQRWAFYLLPGVS
 MASVGIAIYTSMMTSDNYYYTHSIWHILLAGSAALLPPPDQPAEPWACSQKFPCHYQICKNDREELYAV
 T

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6292_h08.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:


ACCN: NM_021259

ORF Size: 2313 bp

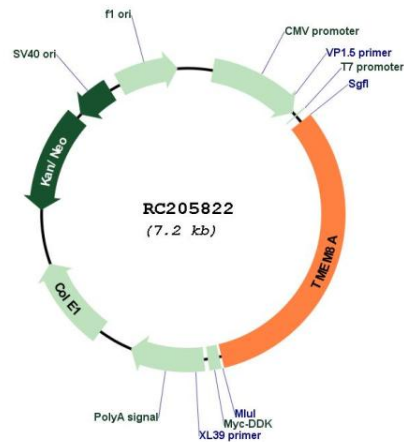
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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.

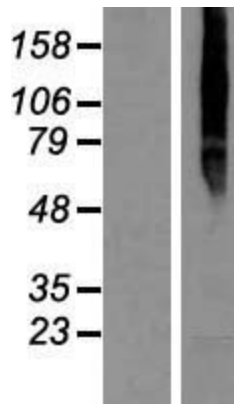
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	NM_021259.3
RefSeq Size:	3656 bp
RefSeq ORF:	2316 bp
Locus ID:	58986
UniProt ID:	Q9HCN3
Cytogenetics:	16p13.3
Protein Families:	Transmembrane
MW:	84.7 kDa
Gene Summary:	Involved in the lipid remodeling steps of GPI-anchor maturation. Lipid remodeling steps consist in the generation of 2 saturated fatty chains at the sn-2 position of GPI-anchor proteins (GPI-AP). Has phospholipase A2 activity that removes an acyl-chain at the sn-2 position of GPI-anchors during the remodeling of GPI. Required for the shedding of the GPI-AP TDGF1, but not CFC1, at the cell surface. Shedding of TDGF1 modulates Nodal signaling by allowing soluble TDGF1 to act as a Nodal coreceptor on other cells (PubMed:27881714). Also indirectly involved in the translocation of RAC1 from the cytosol to the plasma membrane by maintaining the steady state amount of CAV1-enriched plasma membrane subdomains, stabilizing RAC1 at the plasma membrane (PubMed:27835684). In contrast to myomaker (TMEM8C), has no fusogenic activity (PubMed:26858401).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RC205822



Western blot validation of overexpression lysate (Cat# [LY411977]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC205822 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).