

Product datasheet for **RG209885**

GPAT 2 (GPAT2) (NM_207328) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	TurboGFP
Symbol:	GPAT 2
Synonyms:	CT123
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence: >RG209885 representing NM_207328
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAAACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGTTGGAAGGCAGATGCCAACTCAGCCAAGGAGCAGCCCCAGTGGCCGAGAGGCTAGCCTGTGGTCGT
CAGGCTTTGGGATGAAGCTGGAGGCTGTCACTCCATTCTGGGGAAGTATCGCCCTTTGTGGGTCGCTG
TTGCCAGACCTGCACCCCAAGAGCTGGGAGTCCCTCTCCACAGAAGCATAACGGACCTAGGCTTCTGC
AATGTGATCCTGGTGAAGGAGGAGAACAAGGTTTCGGGGCTGGCTGGTTCGGAGGCTCTGCTATTTC
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GTCACACTGCCCAGATTTCTTTCTTTCTCTGCGCCTGCTCAGCCCGCTGCTCAAGGCCTTTGCACAG
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CTGGACCTTCAGAGACCTAGGGGTTCTGCAGCAGACGCCGAGCCCTGCAGGCCCAGGCTCCACCTGTCC
CCTACTTTTGCCAGCCTGGACAATCAGGAAAACTAGAACAGTTTATCCGGCAGTTTCAATTTGTAGC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTAA

Protein Sequence:

>RG209885 representing NM_207328

Red=Cloning site Green=Tags(s)

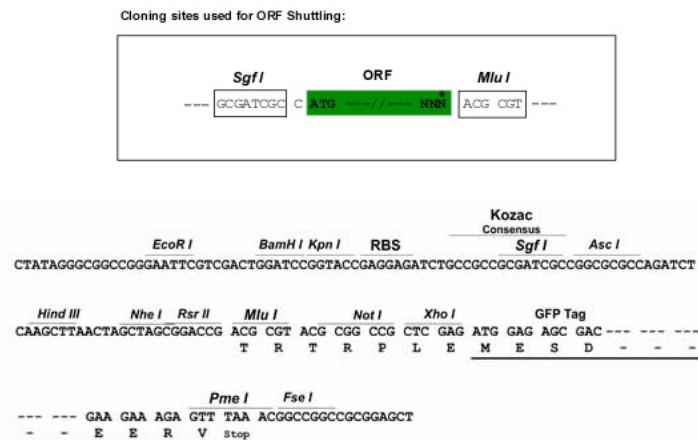
MLEGRCQTQPRSSPSGREASLWSSSGFGMKLEAVTPFLGKYRPFVGRCCQTCTPKSWESLFHRSITDLGFC
NVILVKEENTRFRGWLVRRLCYFLWSLEQHIPPQDVPQKIMESTGVQNLISGRVPGGTGEGQVVDLVKK
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PLLIFLEPPGALGPRLSALGQAWGVFVQAVQVGIQVDPALLVPVAVTYDLVQDAPCDIDHASAPLGLWT
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AAAFRLRQQLPDTELGYTEQLFQFLQATAQEEGIFECADPKLAISAVWTFRDLGVLQQTSPAGPRLHLS
PTFASLDNQEKLQFIRQFICS

TRTRPLE - GFP Tag - V

Restriction Sites:

SgfI-MluI

Cloning Scheme:



ACCN:

NM_207328

ORF Size:

2376 bp

OTI Disclaimer:

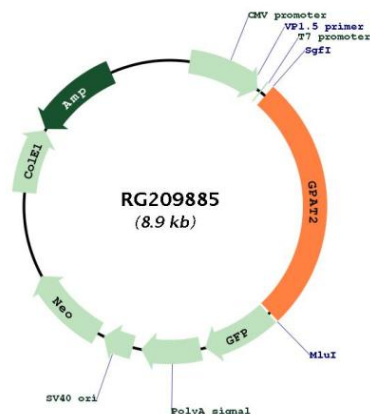
The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in 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:	<u>NM_207328.2</u> , <u>NP_997211.2</u>
RefSeq Size:	2840 bp
RefSeq ORF:	2388 bp
Locus ID:	150763
UniProt ID:	<u>Q6NUI2</u>
Cytogenetics:	2q11.2
Gene Summary:	Esterifies acyl-group from acyl-ACP to the sn-1 position of glycerol-3-phosphate, an essential step in glycerolipid biosynthesis. Required for primary processing step during piRNA biosynthesis. Molecular mechanisms by which it promotes piRNA biosynthesis are unclear and do not involve its acyltransferase activity.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RG209885