

Product datasheet for **MR219094**

Gpat3 (NM_172715) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Gpat3 (NM_172715) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Gpat3
Synonyms:	1-AGPAT; 1-AGPAT 9; 4933407I02Rik; 4933408F15; A230097K15Rik; GPAT-3; Gpat3; mGPAT3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>MR219094 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGAGGGCGCAGACCTGGCAGTGAAGCTCCTGTCCACCTGGCTGACGCTGGTGGGCGCCCTCATCCTTT
 TACCCTCGGCCTTCGGATTATCCCTGGGTATCTCGGAGATCTACATGAAGATCCTGGTGAACCTTGA
 GTGGGCCACATTACGAATTCAGAAAGGAGCCCAAGGAGTCAGCTCTTAAAACTCAGCTTCTGTGGT
 ATTATCCAAGAGATGAGTCACCCATGGAGAAAGGGCTCTCTGGTCTTCGAGGAAGGGACTTCGAGCTCT
 CTGATGTGTTCTATTTCTCAAGAAGGGTTGGAAGCCATTGTGGAGGATGAAGTGACCCAGAGTTCTC
 CTCGAAGAGCTAGTATCATGGAACCTCCTCACACGAACCAATGTCAACTTTCAGTACATCAGTCCAAGG
 CTCACCATGGTGTGGGTGCTGGGTGCTAGTGCCTATTGCTTCTGCTACCTCTGAGGGTCACCTGG
 CTTTCATTGGGATCAGCTTGCTGATTATAGGAACACTGCTGGTGGCCAGCTTCAGACAGCAGCCTCAA
 AACTGGCTGAGTGAAGTGCATCTGACCTGCTGCAGGATCTGTGTTCCGTCCCTATCTGGCAGGATC
 CATTACCATAACAAGCAGTACAGACCCAGAAAGGGAGGTATCTGTGTCGCAATCACACCTCTCCATTG
 ATGTCCTAATCCTGGCCACCGATGGATGTTACGCCATGGTTGGGCAGGTTACGGTGGATTGATGGGGAT
 CATTACAGAGGCCATGGTTAAGGCTTGCTCAGCTCTGGTTGAGCGCTCAGAAATAAAGGACAGACAT
 CTAGTGACTAAGAGATTAAGAACAACATTGCTGACAAGAAAAGTTACCCATTCTAATCTTCCCAGAAG
 GTACTTGATCAACAATACTTCAGTCATGATGTTAAAAAGGGAAGCTTTGAAATCGGAGGAACCATCTA
 TCCAGTGGCCATAAAGTATAACCCAGTTCGGCGATGCCTTCTGGAACAGTAGTAAATACAACTTGGTG
 AGCTACCTGCTTGAATCATGACCAGCTGGGCCATTGTCTGCGACGTGTGGTACATGCCTCCCATGACCA
 GAGAGGAAGGAGAAGACGCAGTTCAGTTTGCAACAGGGTTAAATCTGCTATCGCTGTACAAGGAGGGCT
 GACGGAACCTCCCTGGGATGGAGGGCTGAAGAGAGCAAAGGTGAAGGACACCTTCAAGGAAGAACAACAG
 AAGAATTACAGCAAGATGATCGTGGCAACGGATCTCCCAACCTGGCGAGGGAC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR219094 protein sequence
 Red=Cloning site Green=Tags(s)

MEGADLAVKLLSTWLTLVGGLILLPSAFGLSLGISEIYMKILVKLEWATLRIQKGAPKESALKNSASVG
 IIQRDESPMEKGLSGLRGRDFELSDVFYFSKKGLEAIVEDEVTRQFSSEELVSWNLLTRTNVNFQYISPR
 LTMVWVLGVLVRYCFLLPLRVTLAFIGISLLIIGTTLVGQLPDSSLKNWSELVHLTCCRICVRSLSGTI
 HYHNKQYRPQKGGICVANHTSPIDVLILATDGCYAMVGQVHGGLMGIQRAMVKACPHVWFERSEIKDRH
 LVTKRLKEHIADKKKLPILIFPEGTCINNTSVMMFKKGSFEIGGTIYPVAIKYNPQFGDAFWNSSKYNLV
 SYLLRIMTSWAIIVCDVWYMPMTREEGEDAVQFANRVKSAIAVQGGTELTPWDGGLKRAKVKDTFKEEQQ
 KNYSKMIVGNPNSLARD

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:



ACCN: NM_172715

ORF Size: 1317 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_172715.2](#)

RefSeq Size: 2877 bp

RefSeq ORF: 1317 bp

Locus ID: 231510

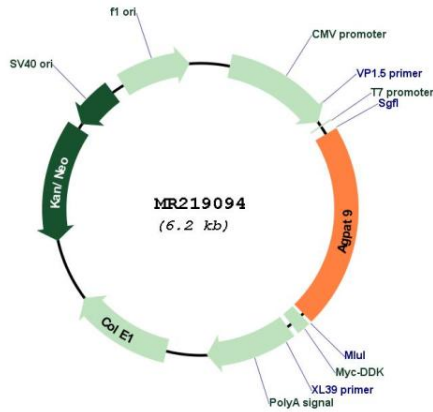
UniProt ID: [Q8C0N2](#)

Cytogenetics: 5 E4

MW: 49 kDa

Gene Summary: Converts glycerol-3-phosphate to 1-acyl-sn-glycerol-3-phosphate (lysophosphatidic acid or LPA) by incorporating an acyl moiety at the sn-1 position of the glycerol backbone (PubMed:17170135). Also converts LPA into 1,2-diacyl-sn-glycerol-3-phosphate (phosphatidic acid or PA) by incorporating an acyl moiety at the sn-2 position of the glycerol backbone (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR219094