

Product datasheet for **MC221731**

Gpat2 (NM_001081089) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Gpat2 (NM_001081089) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Gpat2
Synonyms:	A530057A03Rik; Gm116; xGPAT1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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Fully Sequenced ORF: >MC221731 representing NM_001081089
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGGATACCATGTTGAAATCCAACCCCAACCCAGCAGAGGAGTAACCACAATGGTCAAGAGACCAGCC
 TTTGGTCCTCAAGCTTTGGGATGAAGATGGAGGCCATCACTCCATTCCTGGGAAAGTATCGCCCTTTAT
 GGGCCGCTGCTGCCAGACCTGTACTCCTAAGAGCTGGGAGTCCCTCTCCACAGAAGCATATGGACCTG
 GGCTTCTGCAACGTGATCCTTGTGAAGGAGGAGAACCAGGTTCCGGGGCTGGCTGGTTCGACGGCTCT
 GCTATTTCTGTGGTCCCTGGAGCAGCACATACCACCAGTTTTGATGCCTCCAGAAGATCATGGAAAA
 CACTGGGGTGCAGAACCTCCTCTCGGGGAGGGTCCGGGAGCGGCTGGAGAAGGCCAGGCGCCTGAATTA
 GTGAAGAAAGAGGTACAGCGTATCCTGGCCACATTAGACCACACCCCGCCCTTCTTGCTCAGGCTGT
 TCAGCTGGGCACTGCTGTGGTCCCTGAACCGCCTTCTCCTGAATGTACAACCTCACAAGGGACAGATGAA
 GATGGTTCAGAAGCTGTGCAGGAGGGCTCCTCACTTGTCTTCTTCTACACACAAGTCCCTCTGGAT
 GGATTCCTGCTGCCTTTTGTACTGTTCTCCAAGGCCTCGGTGTGGTCCGTGTGGCTTTAGACTCCCGCA
 CATGTTCCCTGCTCTCAGAGCTCTATTGAGGAACTTGGGGACTTTTCTGCCCCAGAGGTCACCT
 CTCCTTGGACAACCTCAGAGGGCATCCTTGAAGGGCTGTGGTCCGTGCAACTGTGGAGGAGCTGCTTACT
 AGTGGTCAGCCTCTGCTCATCTTCTGGAAGAGCCCTGGGTCAGGAGGAGGCTTTCTGCCTGG
 GCCAGGCTGGCTAGGAGTGGTAATCCAGGCGGTCCAGGAGGCAATATCTCAGATGCCACACTGGTACC
 AGTTGCCATTGCCTATGACCTGGTTCAGATGCACCATGAACATGAACCATGATTTGGCTCCCTGGGG
 CTATGGACAGGAGCCTTGGCTGTCTTTCGAGACTGTGTAAGTGTGGGCTGCAACCGTAGAGTCTGTG
 TTCGGGTGCACCTTGCCAGCCATTTTCCCTCCAGGAATACACCATCAATGCTAGAAGTTGCTGGGATAG
 CAGGCAGACCCTGGAACACTTGTGACGCCATTGTGCTAGGTGAATGTAGTGTGTTCCGGACACTGAG
 AAGGAGCAGGAGTGGACCCACCAACTGGCCTCCTCCTGGCCCTTAAAGAGGAGGACCAGCTCCTGGTCA
 GAAGACTGAGCCGGCATGTTCTGAGTGCCAGTGTGGCCAGCTCCGCAGTATGAGCACAGCCATCATGGC
 CACTGCTTTTCTGTAAGCACCAAAAGGGTGTGGTCTGTACAGCTCCTGGGAGAATTCTCCTGGCTG
 ACAGAGGAGACTGCTCCGAGGTTTGTATGTGGGCTTCTCAGGGCAGCTGCGGTGCCTGGCCCAACATA
 CACTGAGCCTATTGAGGGCACATGTGGTCTGCTGCGTGTCCACCAAGGGGACTTGGTGGTGTACCTCG
 GCCTGGCCAGGCTCACACACCTGGCAGCCTTGTAGTATGGAATTGCTGCCAACCTTCTGAGTGGCT
 GTGGTGCCTGTGCAGTGCAGGGGTTGCTGGCAGGAGTACCACCTGAGGGGCTTGGGAGCTGCAGG
 GCATAGAGCTACTGAGTCAGAATGAACTGTACCGCCAGATCCTACTGCTGCTGCACCTGCTACCTCAAGA
 CCTACTGCTGCCCGACCTGCCAGTCTTCTACTGCTACTGTCAGGAAGTGTAGACCGGCTCATCCAG
 TGTGGACTCCTAGTTGCTGAGGAGACTCCAGGCTCCCGGCCAGCCTGTGACACAGGAAGACAGCATCTGA
 GTGCAAAGCTGCTGTGGAAGCCGAGTGGGGACTTACTGACAGTGTAGAGTGTACTTTGAGGAGCCAGG
 AGGCCGCTGCTTCCAGGCTTAGCCAGCAATCCCGCTGCCCTGACTTCTTCTTCTCTGCGGCTTGTCTC
 AGTCCATACTCAAGGCCTTCCACAGGCGGCCACCTTCTCCACTTAGGGCAGCTGCCAGATTAGAGG
 TGGCTACTCAGAGAAGTTGTTCCAGTTTTACAGGCTGTGCCAAGAAGAAGGATCTTTGAGTGTGC
 AGACCCAAACCTTGCTATCAGTGCAGTCTGGACGTTCAAAGATCTGGGGTACTTCCAGGAGATGCCTAGC
 CCTACAGGACCCAGCTCCACCTGTCCCCTACATTTGCCACCCGGGACAATCAGGACAAGCTGGAACAAT
 TTATCCGACAGTTCATCTGCAGT**TAG**

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: Sgfl-Mlul
ACCN: NM_001081089
Insert Size: 2406 bp

OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
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:	<ol style="list-style-type: none">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_001081089.2 , NP_001074558.2
RefSeq Size:	2636 bp
RefSeq ORF:	2406 bp
Locus ID:	215456
UniProt ID:	Q14DK4
Cytogenetics:	2 F1
Gene Summary:	Esterifies acyl-group from acyl-ACP to the sn-1 position of glycerol-3-phosphate, an essential step in glycerolipid biosynthesis (PubMed:17013544, PubMed:17689486). Required for primary processing step during piRNA biosynthesis (PubMed:23611983). Molecular mechanisms by which it promotes piRNA biosynthesis are unclear and do not involve its acyltransferase activity (PubMed:23611983).[UniProtKB/Swiss-Prot Function]