

Product datasheet for **MG204089**

Glyat (NM_145935) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Glyat (NM_145935) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Glyat
Synonyms:	A330009E03Rik; ACGNAT; AI195249; AI315345; CAT; GAT
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG204089 representing NM_145935 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGATTGTTCCATTACAAGGTGCACAGATGCTACAAATGTTGGAGAAATCCTTGAGGAAGTACCTTCCTG
 AATCCTTAAAGGTTTATGGGACCGTCTATCACATGATCCATGGAAACCCATTCAACCTAAAAGCCCTAGT
 TGACAAGTGGCCTGATTTTAACACAGTGGTTGTCCGCCCTCAAGAACAGGAGATGACAGATGACCTTGAT
 TTCTACATCAATACTTACCAGGTCTACTCAAAGACCCCCAGAACTGTCAGGAATTCCTGGAGTCCTCAG
 AAGTCATTAAGTGAACAACATTTGCAGATTCAAAGTCCCAGTCCCACCTGAATAAGACGATACAAAA
 TCTTGCAAGCATCCAATCTTTCAAATCAAACATTCAGAAAACATCCTCTATGTATCATCAGAGACAATC
 AAGAACTGTTCCCTTCCTGCTGGATACAAAGAATTTATCGACAGGAAGTGGCAAGCCCAAGGCCATTG
 ATCAAGACAAGTTTAACTTTTCCTTGGATGTTGTCCATGCTGCCTTGGTGAATAAATTCTGGCTTTT
 TGGTGGCAATGAGAGGAGCCAGAGATTCATTGAACGCTGCATAAAGAACTTCCCAAGTTCCTGTGCCTG
 GGGCCTGAGGGAACCCCTGCATCTTGGACTCTAATGGACCAAAGTGGAGAGATGCGAATGGGAGGCACTA
 TGCCTGAGTACCGGCTCCAAGGTCTTGTCTCCTTTGTTGTCCATTACAAGACCAGATTATGACAAAGCG
 TGGTTATCCTGTTTATTCTCACACGGAGAAAAGTAATATCGCTATGCAAAAAATGAGTTACACACTGCAG
 CATCTCCCATGCCCTGTGCCTGGAACCAATGGAAGTGCATGCCTATG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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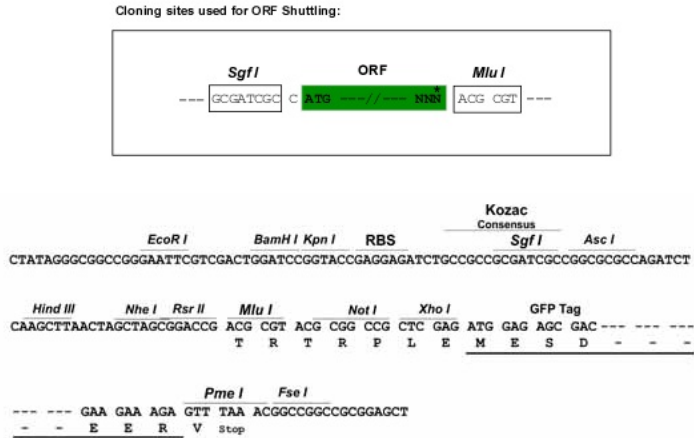
Protein Sequence: >MG204089 representing NM_145935
 Red=Cloning site Green=Tags(s)

MIVPLQGAQMLQMLEKSLRKYLPESLKVYGTVYHMIHGNPFNLKALVDKWPDFNTVVVRPQEQEMTDDL
 FYINTYQVYSKDPQNCQEFLESSEVINWKQHLQIQSSQSHLNKTIQNLAISQSFQIKHSENLVVSSETI
 KKLFPSSLDTKNLSTGSGKPKAIDQDKFKLSSLDVVHAALVNKFWLFGGNSRQFIERCIKNFPSSCVL
 GPEGTPASWTLMDQTGEMRMGGTMPEYRLQGLVSFVHSQDQIMTKRGYPVYSHTEKSNIAMQKMSYTLQ
 HLPMPCAWNQWKCPM

TRTRPLE – GFP Tag – V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_145935

ORF Size: 888 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_145935.3](#)

RefSeq Size: 1311 bp

RefSeq ORF: 891 bp

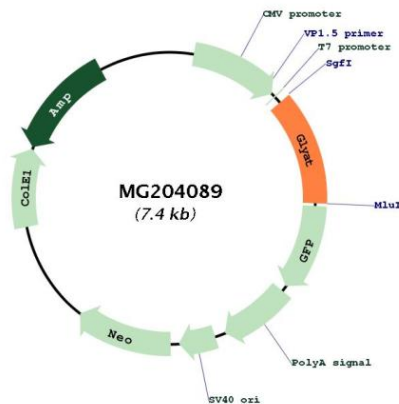
Locus ID: 107146

UniProt ID: [Q91XE0](#)

Cytogenetics: 19 A

Gene Summary: Mitochondrial acyltransferase which transfers an acyl group to the N-terminus of glycine and glutamine, although much less efficiently. Can conjugate a multitude of substrates to form a variety of N-acylglycines, thereby detoxify xenobiotics, such as benzoic acid or salicylic acid, and endogenous organic acids, such as isovaleric acid.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MG204089