

## Product datasheet for **RC232374**

### Monoacylglycerol Lipase (MGLL) (NM\_001256585) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Monoacylglycerol Lipase (MGLL) (NM_001256585) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	MGLL
Synonyms:	HU-K5; HUK5; MAGL; MGL
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>RC232374 representing NM_001256585 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**GCGATCGCC**

ATGGAACAGGACCTGAAGACCCTTCCAGCATGCCAGAGGAAAGTCCCCAGGCGGACCCCGCAGAGCA  
TTCCCTACCAGGACCTCCCTCACCTGGTCAATGCAGACGGACAGTACCTCTTCTGCAGGACTGAAACC  
CACAGGCACACCAAGGCCCTCATCTTTGTGTCCCATGGAGCCGGAGAGCACAGTGGCCGCTATGAAGAG  
CTGGCTCGGATGCTGATGGGGCTGGACCTGCTGGTGTTCGCCACGACCATGTTGGCCACGGACAGAGCG  
AAGGGGAGAGGATGGTAGTGTCTGACTTCCACGTTTTTCGTCAGGGATGTGTTGCAGCATGTGGATCCAT  
GCAGAAAGACTACCCTGGGCTTCTGTCTTCTTCTGGGCCACTCCATGGGAGGCCCATCGCCATCCTC  
ACGGCCGCAGAGAGGCCGGGCCACTTCGCCGCATGGTACTCATTTTCGCCTCTGGTTCTTGCCAATCCTG  
AATCTGCAACAACCTTCAAGGTCGACATTTATAACTCAGACCCCTGATCTGCCGGCAGGGCTGAAGGT  
GTGCTTCGGCATCCAACCTGCTGAATGCCGTCTCACGGGTGGAGCGGCCCTCCCAAGCTGACTGTGCC  
TTCTGCTGCTCCAGGGCTCTGCCGATCGCCTATGTGACAGCAAAGGGGCTACCTGCTCATGGAGTTAG  
CCAAGAGCCAGGACAAGACTCTCAAGATTTATGAAGGTGCCTACCATGTTCTCCACAAGGAGCTTCTCTGA  
AGTCAACCAACTCCGTCTTCCATGAAATAAACATGTGGGTCTCTCAAAGGACAGCCACGGCAGGAACTGCG  
TCCCCACCC

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RC232374 representing NM\_001256585  
 Red=Cloning site Green=Tags(s)

METGPEDPSSMPEESSPRRTPQSIPIYQDLPHLVNADGQYLF CRYWKPTGTPKALIFVSHGAGEHSGRYEE  
 LARMLMGLDLLVFAHDHVGHGQSEGERMVVSDFHVFRDVLQHVDMSMQKDYPGLPVFLLGHSMGGAIAIL  
 TAAERPGHFAGMVLISPLVLANPESATTFKVDIYNSDPLICRAGLKVCFGIQLLNAVSRVERALPKLTVP  
 FLLLQGSADRLCDSKGAYLLMELAKSQDKTLKIYEGAYHVLHKELPEVTNSVVFHEINMWVSQRTATAGTA  
 SPP

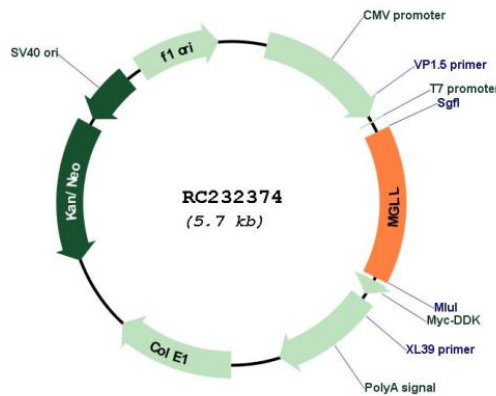
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**Plasmid Map:**



**ACCN:** NM\_001256585

**ORF Size:** 849 bp

<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_001256585.1</a> , <a href="#">NP_001243514.1</a>
<b>RefSeq Size:</b>	4563 bp
<b>RefSeq ORF:</b>	852 bp
<b>Locus ID:</b>	11343
<b>UniProt ID:</b>	<a href="#">Q99685</a>
<b>Cytogenetics:</b>	3q21.3
<b>Protein Families:</b>	Druggable Genome, Protease
<b>Protein Pathways:</b>	Glycerolipid metabolism, Metabolic pathways
<b>MW:</b>	31.6 kDa
<b>Gene Summary:</b>	This gene encodes a serine hydrolase of the AB hydrolase superfamily that catalyzes the conversion of monoacylglycerides to free fatty acids and glycerol. The encoded protein plays a critical role in several physiological processes including pain and nociception through hydrolysis of the endocannabinoid 2-arachidonoylglycerol. Expression of this gene may play a role in cancer tumorigenesis and metastasis. Alternatively spliced transcript variants encoding multiple isoforms have been observed for this gene. [provided by RefSeq, Feb 2012]