

## Product datasheet for **RG218358**

### Monoacylglycerol Lipase (MGLL) (NM\_007283) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Monoacylglycerol Lipase (MGLL) (NM_007283) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Monoacylglycerol Lipase
Synonyms:	HU-K5; HUK5; MAGL; MGL
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG218358 representing NM_007283 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGAACAGGACCTGAAGACCCCTCCAGCATGCCAGAGGAAAGTCCCCAGGCGGACCCCGCAGAGCA  
TTCCCTACCAGGACCTCCCTCACCTGGTCAATGCAGACGGACAGTACCTTTCTGCAGGTACTGAAACC  
CACAGGCACACCAAGGCCCTCATCTTTGTGTCCCATGGAGCCGGAGAGCACAGTGGCCGCTATGAAGAG  
CTGGCTCGGATGCTGATGGGCTGGACCTGCTGGTGTTCGCCACGACCATGTTGGCCACGGACAGAGCG  
AAGGGGAGAGGATGGTAGTGTCTGACTTCCACGTTTTTCGTCAGGGATGTGTTGCAGCATGTGGATTCCAT  
GCAGAAAGACTACCTGGGCTTCTGTCTTCTTCTGGGCCACTCCATGGGAGGCCCATCGCCATCCTC  
ACGGCCGAGAGAGGCCGGCCACTTCGCCGGCATGGTACTCATTTCGCCTCTGGTTCTTGCCAATCCTG  
AATCTGCAAACTTTCAAGGTCCTTGCTGCGAAAGTGCTCAACCTTGTGCTGCCAACTTGTCCCTCGG  
GCCCATCGACTCCAGCGTGCTCTCTCGGAATAAGACAGAGGTCGACATTTATAACTCAGACCCCTGATC  
TGCCGGGCAGGGCTGAAGGTGTGCTTCGGCATCCAAGTCTGAATGCCGTCTCACGGGTGGAGCGGCC  
TCCCAAGCTGACTGTGCCCTTCTGTCTCCAGGGCTCTGCCGATCGCCTATGTGACAGCAAAGGGGC  
CTACCTGCTCATGGAGTTAGCCAAGAGCCAGGACAAGACTCTCAAGATTTATGAAGTGCCTACCATGTT  
CTCCACAAGGAGCTTCTGAAGTCACCAACTCCGCTTCCATGAAATAAACATGTGGTCTCTCAAAGGA  
CAGCCACGGCAGGAAGTCCGTCACCC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



[View online »](#)

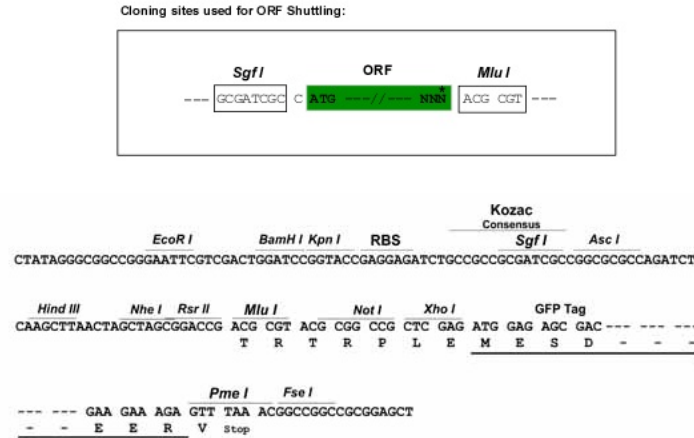
**Protein Sequence:** >RG218358 representing NM\_007283  
Red=Cloning site Green=Tags(s)

METGPEDPSSMPEESSPRRTPQSIPIYQDLPHLVNADGQYLF CRYWKPTGTPKALIFVSHGAGEHSGRYEE  
 LARMLMGLDLLVFAHDHVGHGQSEGERMVVSDFHVFVRDVLQHVDMSMQDYPLPVFLLGHSMGGAIAIL  
 TAAERPGHFAGMVLISPLVLANPESATTFKVLAAKVLNLVLPNLSLGPIDSSVL SRNKTEVDIYNSDPLI  
 CRAGLKVCFGIQLLNAVSRVERALPKL TVPFLLLQGSADRLCDSKGAYLLMELAKSQDKTLKIYEGAYHV  
 LHKELPEVTNSVFHEINMWVSQRTATAGTASPP

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_007283

**ORF Size:** 939 bp

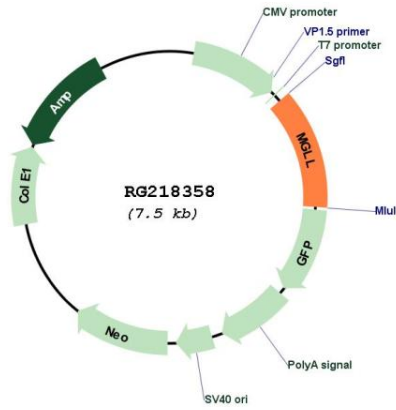
**OTI Disclaimer:** The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone 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).

<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>Note:</b>	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
<b>RefSeq:</b>	<a href="#">NM_007283.6</a>
<b>RefSeq Size:</b>	4617 bp
<b>RefSeq ORF:</b>	942 bp
<b>Locus ID:</b>	11343
<b>UniProt ID:</b>	<a href="#">Q99685</a>
<b>Cytogenetics:</b>	3q21.3
<b>Domains:</b>	abhydrolase
<b>Protein Families:</b>	Druggable Genome, Protease
<b>Protein Pathways:</b>	Glycerolipid metabolism, Metabolic pathways
<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 nociperception 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]

Product images:



Circular map for RG218358