

Product datasheet for **RC218358**

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:	Myc-DDK
Symbol:	Monoacylglycerol Lipase
Synonyms:	HU-K5; HUK5; MAGL; MGL
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC218358 representing NM_007283 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGC**C

ATGGAACAGGACCTGAAGACCCCTCCAGCATGCCAGAGGAAAGTCCCCAGGCGGACCCCGCAGAGCA
TTCCCTACCAGGACCTCCCTCACCTGGTCAATGCAGACGGACAGTACCTTTCTGCAGGACTGAAACC
CACAGGCACACCAAGGCCCTCATCTTTGTGTCCCATGGAGCCGGAGAGCACAGTGGCCGCTATGAAGAG
CTGGCTCGGATGCTGATGGGCTGGACCTGCTGGTGTTCGCCACGACCATGTTGGCCACGGACAGAGCG
AAGGGGAGAGGATGGTAGTGTCTGACTTCCACGTTTTTCGTCAGGGATGTGTTGCAGCATGTGGATCCAT
GCAGAAAGACTACCTGGGCTTCTGTCTTCTTCTGGGCCACTCCATGGGAGGCCCATCGCCATCCTC
ACGGCCGAGAGAGGCCGGCCACTTCGCCGCGCATGGTACTCATTTCGCCTCTGGTTCTTGCCAATCCTG
AATCTGCAAACTTTCAAGGTCCTTGCTGCGAAAGTGCTCAACCTTGCTGCCAACTTGTCCTCGG
GCCCATCGACTCCAGCGTCTCTCGGAATAAGACAGAGGTCGACATTTATAACTCAGACCCCTGATC
TGCCGGGCAGGGCTGAAGGTGTGCTTCGGCATCCAAGTCTGAATGCCGCTCACGGGTGGAGCGGCC
TCCCAAGCTGACTGTGCCCTTCTGTCTCCAGGGCTCTGCCGATCGCCTATGTGACAGCAAAGGGGC
CTACCTGCTCATGGAGTTAGCCAAGAGCCAGACAAGACTCTCAAGATTTATGAAGTGCCTACCATGTT
CTCCACAAGGAGCTTCTGAAGTCACCAACTCCGCTTCCATGAAATAAACATGTGGTCTCTCAAAGGA
CAGCCACGGCAGGAAGTCCGTCGCCACCC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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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_007283.6](#)

RefSeq Size: 4617 bp

RefSeq ORF: 942 bp

Locus ID: 11343

UniProt ID: [Q99685](#)

Cytogenetics: 3q21.3

Domains: abhydrolase

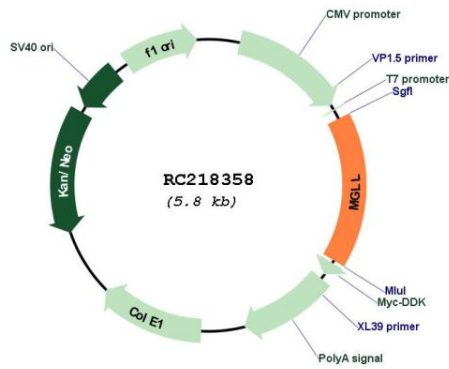
Protein Families: Druggable Genome, Protease

Protein Pathways: Glycerolipid metabolism, Metabolic pathways

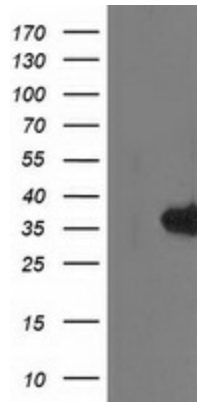
MW: 34.1 kDa

Gene Summary: 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]

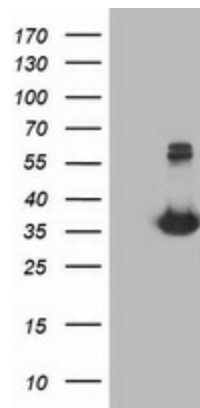
Product images:



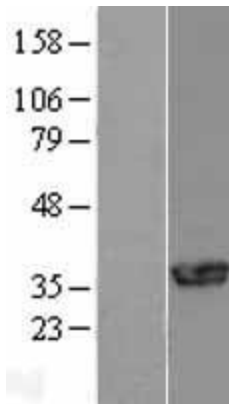
Circular map for RC218358



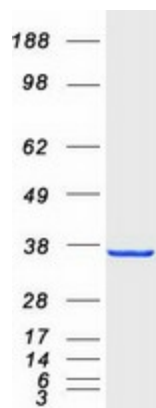
HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY MGLL (RC218358, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-MGLL [TA502886]. Positive lysates [LY402124] (100ug) and [LC402124] (20ug) can be purchased separately from OriGene.



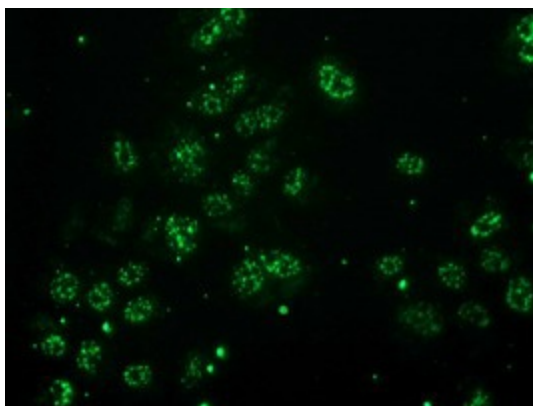
HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY MGLL (Cat# RC218358, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-MGLL (Cat# [TA502932]). Positive lysates [LY402124] (100ug) and [LC402124] (20ug) can be purchased separately from OriGene.



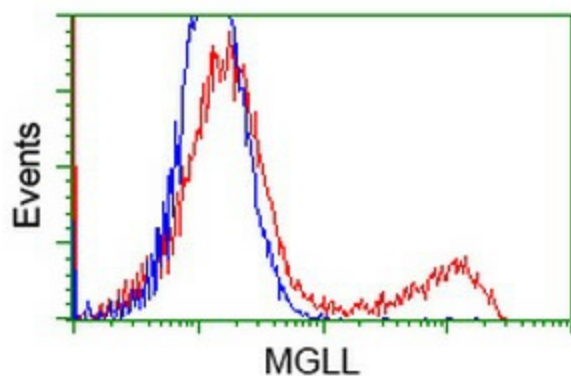
Western blot validation of overexpression lysate (Cat# [LY402124]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC218358 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified MGLL protein (Cat# [TP318358]). The protein was produced from HEK293T cells transfected with MGLL cDNA clone (Cat# RC218358) using MegaTran 2.0 (Cat# [TT210002]).



Anti-MGLL mouse monoclonal antibody ([TA502886]) immunofluorescent staining of COS7 cells transiently transfected by pCMV6-ENTRY MGLL (RC218358).



HEK293T cells transfected with either RC218358 overexpress plasmid (Red) or empty vector control plasmid (Blue) were immunostained by anti-MGLL antibody ([TA502886]), and then analyzed by flow cytometry.