

Recombinant Human MGLL Protein, His-tagged

Cat. No. MGLL-103H Lot. No. (See product label)

SPECIFICATION

Product Overview	Active full length human recombinant C-terminal His-tagged MGLL protein (2-313) was expressed in E. coli.
Species	Human
Source	E.coli
ProteinLength	2-313
Description	<p>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.</p>
Molecular Mass	39 kDa
Purity	≥95% as determined by SDS-PAGE
Unit Definition	One unit of enzyme will produce 1 μmol of 4-nitrophenol per minute at 25 centigrade in 10 mM Tris, pH 7.2, 1 mM EDTA using 1.5 μM 4-nitrophenylacetate as substrate, measured by absorbance at 412 nm.

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Stability	≥ 2 year
Storage	At -80 centigrade.
Storage Buffer	50 mM HEPES, pH 7.4, with 100 mM sodium chloride, 5 mM MgCl ₂ , 0.1% CHAPS, and 25% glycerol

GENE INFORMATION

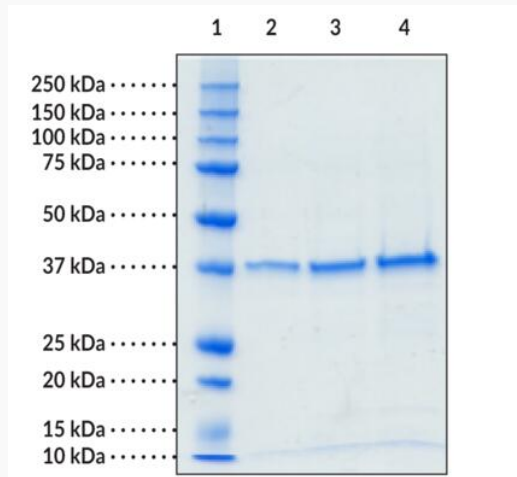
Gene Name	MGLL monoglyceride lipase [Homo sapiens (human)]
Official Symbol	MGLL
Synonyms	MGLL; monoglyceride lipase; MGL; HUK5; MAGL; HU-K5; monoglyceride lipase; lysophospholipase homolog; monoacylglycerol lipase; EC 3.1.1.23
Gene ID	11343
mRNA Refseq	NM_007283
Protein Refseq	NP_009214
MIM	609699
UniProt ID	Q99685

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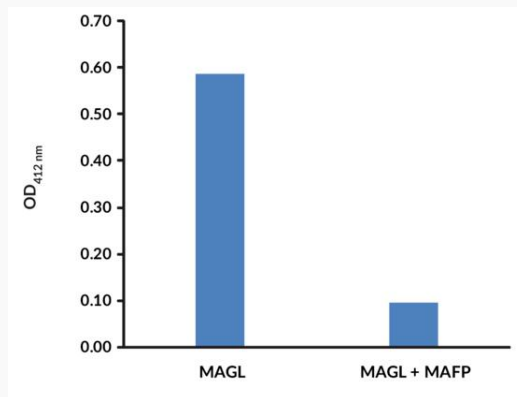
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**SDS-PAGE analysis
of MGLL**



Lane 1: MW Markers
 Lane 2: MGLL (1 µg)
 Lane 3: MGLL (2 µg)
 Lane 4: MGLL (5 µg)

MAGL Activity



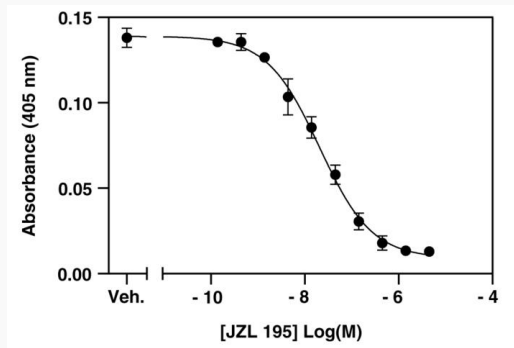
MAGL activity was determined using 250 µM 4-NPA and was inhibited by 1 µM MAFP, a general serine hydrolase inhibitor.

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**Inhibition of human
recombinant MAGL
by JZL 195 (IC₅₀=20
nM)**



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