

Recombinant Human Glutamate-Cysteine Ligase, Modifier Subunit, His-tagged

Cat. No. GCLM-2522H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant human GCLM protein, fused to His-tag at N-terminus, was expressed in E. coli and purified by using conventional chromatography techniques.
Species	Human
Source	E.coli
ProteinLength	1-274aa
Description	Glutamate-cysteine ligase, also known as gamma-glutamylcysteine synthetase, is the first rate limiting enzyme of glutathione synthesis. The enzyme consists of two subunits, a heavy catalytic subunit and a light regulatory subunit. Gamma glutamylcysteine synthetase deficiency has been implicated in some forms of hemolytic anemia.
Form	Liquid. 20mM Tris-HCl buffer (pH8.0) containing 10% glycerol, 0.15M NaCl.
Molecular Mass	33.3kDa (298aa), confirmed by MALDI-TOF
AA Sequence	MGSSHHHHHH SSGLVPRGSH MGSHTMGDSR AAKALLARAR TLHLQTGNLL NWGRLRKKCP STHSEELHDC IQKTLNEWSS QINPDLVREF PDVLECTVSH AVEKINPDER EEMKVS AKLF IVESNSSSST RSAVDMACSV LGVAQLDSVI IASPPIEDGV NLSLEHLQPY WEELENLVQS KKIVAIGTSD LDKTQLEQLY QWAQVKPNSN QVNLASCCVM PPDLTAFKQ FDIQLLTHND PKELLSEASF

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

	QEALQESIPD IQAHEWVPLW LLRYSVIVKS RGIKSKGYI LQAKRRGS
Purity	>90% by SDS - PAGE
Applications	SDS-PAGE
Storage	Can be stored at 4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.
Concentration	1 mg/ml (determined by Bradford assay)
GENE INFORMATION	
Gene Name	GCLM glutamate-cysteine ligase, modifier subunit [Homo sapiens]
Official Symbol	GCLM
Synonyms	GCLM; glutamate-cysteine ligase, modifier subunit; GLCLR; glutamate--cysteine ligase regulatory subunit; gamma glutamylcysteine synthetase; GCS light chain; GSC light chain; gamma-ECS regulatory subunit; glutamate--cysteine ligase modifier subunit; glutamate-cysteine ligase regulatory protein; gamma-glutamylcysteine synthetase regulatory subunit; glutamate-cysteine ligase (gamma-glutamylcysteine synthetase), regulatory (30.8kD);
Gene ID	2730
mRNA Refseq	NM_002061
Protein Refseq	NP_002052
MIM	601176

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

UniProt ID	P48507
Chromosome Location	1p21
Pathway	Biological oxidations, organism-specific biosystem; Glutathione biosynthesis, glutamate => glutathione, organism-specific biosystem; Glutathione biosynthesis, glutamate => glutathione, conserved biosystem; Glutathione conjugation, organism-specific biosystem; Glutathione metabolism, organism-specific biosystem;
Function	contributes_to glutamate-cysteine ligase activity; contributes_to glutamate-cysteine ligase activity; glutamate-cysteine ligase catalytic subunit binding; protein heterodimerization activity;

 Tel: 1-631-559-9269 1-516-512-3133 Email: info@creative-biomart.com  Fax: 1-631-938-8127 45-1 Ramsey Road, Shirley, NY 11967, USA