

Product datasheet for TP307915M

GCLC (NM_001498) Human Recombinant Protein

Product data:

Product Type:	Recombinant Proteins
Description:	Recombinant protein of human glutamate-cysteine ligase, catalytic subunit (GCLC), 100 µg
Species:	Human
Expression Host:	HEK293T
Expression cDNA Clone or AA Sequence:	>RC207915 protein sequence Red=Cloning site Green=Tags(s)

MGLLSQGSPLSWEETKRHADHVRRHGILQLFLHIYHAVKDRHKDVLKVGDEVEYMLVSFDHENKKVRLVLS
GEKVLETLQEKGERTNPNHPTLWRPEYGSYMIETPGQPYGGTMSEFNTVEANMRKRRKEATSILEENQA
LCTITSPRLGCPGFTLPEVKPNPVEGGASKSLFFPDEAINKHPRFSTLTRNIRHRRGEKVINVPFKD
KNTPSPFIETFTEDDEASRASKPDHIYMDAMGFGMGNCCQLQVTFQACSEARYLYDQLATICPIVMALS
AASPFYRGYVSDIDCRWGVISASVDDRTREERGLEPLKNNNYRISKSRYSIDSYLSKCGEKYNDIDLTI
DKEIYEQLLQEGIDHLLAQHVAHLFIRDPLTLFEEKIHLDDANESDHFENIQSTNWQTMRFKPPPNSDI
GWRVEFRPMEVQLTDFENSAYVVFVLLTRVILSYKLDFLIPLSKVDENMKVAQKRDAVLQGMFYFRKDI
CKGGNAVVDGCGKAQNSTELAAEEYTLMSIDTIINGKEGVFPGLIPLNSYLENMEVDVDTRCSILNYLK
LIKKRASGELMTVARWMREFIANHPDYKQDSVITDEMNYSLILKCNQIANELCEPELLGSAFRKVKYSG
SKTDSSN

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag:	C-Myc/DDK
Predicted MW:	72.6 kDa
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol
Preparation:	Recombinant protein was captured through anti-DDK affinity column followed by conventional chromatography steps.
Note:	For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.
Storage:	Store at -80°C.



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Stability: Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.

RefSeq: [NP_001489](#)

Locus ID: 2729

UniProt ID: [P48506](#), [Q14TF0](#)

RefSeq Size: 3823

Cytogenetics: 6p12.1

RefSeq ORF: 1911

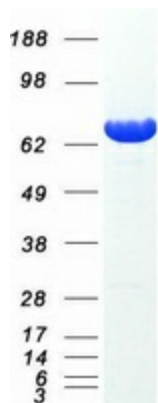
Synonyms: GCL; GCS; GLCL; GLCLC

Summary: 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. This locus encodes the catalytic subunit, while the regulatory subunit is derived from a different gene located on chromosome 1p22-p21. Mutations at this locus have been associated with hemolytic anemia due to deficiency of gamma-glutamylcysteine synthetase and susceptibility to myocardial infarction.[provided by RefSeq, Oct 2010]

Protein Families: Druggable Genome

Protein Pathways: Glutathione metabolism, Metabolic pathways

Product images:



Coomassie blue staining of purified GCLC protein (Cat# [TP307915]). The protein was produced from HEK293T cells transfected with GCLC cDNA clone (Cat# [RC207915]) using MegaTran 2.0 (Cat# [TT210002]).