

## Product datasheet for TP307915

### GCLC (NM\_001498) Human Recombinant Protein

#### Product data:

**Product Type:** Recombinant Proteins  
**Description:** Recombinant protein of human glutamate-cysteine ligase, catalytic subunit (GCLC), 20 µg  
**Species:** Human  
**Expression Host:** HEK293T  
**Expression cDNA Clone or AA Sequence:** >RC207915 protein sequence  
**Red**=Cloning site **Green**=Tags(s)

MGLLSQGSPLSWEETKRHADHVRRHGILQFLHIYHAVKDRHKDVLKVGDEVEYMLVSFDHENKKVRLVLS  
 GEKVLETLQEKGERTNPNHPTLWRPEYGSYMIEGTPGQPYGGTMSEFNTVEANMRKRRKEATSILEENQALCTITSFPRLGCPGFTLPEVKPNPVEGGASKSLFFPDEAINKHPRFSTLTRNIRHRRGEKVINVPFKDKNTPSPFIETFTEDDEASRASKPDHIYMDAMGFGMGNCLQVTFQACISEARYLYDQLATICPIVMALS  
 AASPFYRGYVSDIDCRWGVISASVDDRTREERGLEPLKNNNYRISKSRYSIDSYLSKCGEKYNDIDLTI  
 DKEIYEQLLQEGIDHLLAQHVAHLFIRDPLTLFEEKIHLDDANESDHFENIQSTNWQTMRFKPPPPNSDI  
 GWRVEFRPMEVQLTDFENSAYVVFVLLTRVILSYKLDFLIPLSKVDENMKVAQKRDAVLQGMFYFRKDI  
 CKGGNAVVDGCGKAQNSTELAAEEYTLMSIDTIINGKEGVFPLIPLNSYLENMEVDVDTRCSILNLYLK  
 LIKKRASGELMTVARWMREFIANHPDYKQDSVITDEMNYSLILKCNQIANELCEPELLGSAFRKVKYSG  
 SKTDSSN

**TRTRPLEQKLISEEDLAANDILDYKDDDDKV**

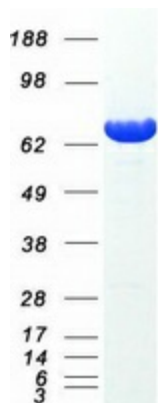
**Tag:** C-Myc/DDK  
**Predicted MW:** 72.6 kDa  
**Concentration:** >0.05 µg/µL as determined by microplate BCA method  
**Purity:** > 80% as determined by SDS-PAGE and Coomassie blue staining  
**Buffer:** 25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol  
**Preparation:** Recombinant protein was 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.



[View online »](#)

<b>Stability:</b>	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
<b>RefSeq:</b>	<a href="#">NP_001489</a>
<b>Locus ID:</b>	2729
<b>UniProt ID:</b>	<a href="#">P48506</a>
<b>RefSeq Size:</b>	3823
<b>Cytogenetics:</b>	6p12.1
<b>RefSeq ORF:</b>	1911
<b>Synonyms:</b>	GCL; GCS; GLCL; GLCLC
<b>Summary:</b>	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]
<b>Protein Families:</b>	Druggable Genome
<b>Protein Pathways:</b>	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]).