

Product datasheet for PH307915

GCLC (NM_001498) Human Mass Spec Standard

Product data:

Product Type:	Mass Spec Standards
Description:	GCLC MS Standard C13 and N15-labeled recombinant protein (NP_001489)
Species:	Human
Expression Host:	HEK293
Expression cDNA Clone or AA Sequence:	RC207915
Predicted MW:	72.8 kDa
Protein Sequence:	>RC207915 protein sequence Red=Cloning site Green=Tags(s)

MGLLSQGSPLSWEETKRHADHVRRHGILQFLHIYHAVKDRHKDVLKWGDEVEYMLVSFDHENKKVRLVLS
GEKVLETLQEKGERTNPNHPTLWRPEYGSYMIETPGQPYPYGGTMSEFNTVEANMRKRKEATSILEENQA
LCTITSFRLGCPGFTLPEVKPNPVEGGASKSLFFPDEAINKHPRFSTLTRNIRHRRGEKVVINVPFIKFD
KNTSPFIEFTTEDDEASRASKPDHIYMDAMGFMGNCCLVTFQACSISEARYLYDQLATICPIVMALS
AASPFYRGYVSDIDCRWGVISASVDDRTREERGLEPLKNNNYRISKSRYSIDSYLSKCGEYNDIDLTI
DKEIYEQLLQEGIDHLLAQHVAHLFIRDPLTLFEEKIHLDDANESDHFENIQSTNWQTMRFKPPPNDSI
GWRVEFRPMEVQLTDFENSAYVVFVLLTRVILSYKLDLFIPLSKVDENMKVAQKRDAVLQGMFYFRKDI
CKGGNAVVDGCGKAQNSTELAAEYTLMSIDTIINGKEGVFPGLIPIILNSYLENMEVDVDRCSILNYLK
LIKKRASGELMTVARWMREFIANHPDYKQDSVITDEMNYSLILKCNQIANELCEPELLGSAFRKVKYSG
SKTDSSN

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag:	C-Myc/DDK
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Labeling Method:	Labeled with [U- 13C6, 15N4]-L-Arginine and [U- 13C6, 15N2]-L-Lysine
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3
Storage:	Store at -80°C. Avoid repeated freeze-thaw cycles.
Stability:	Stable for 3 months from receipt of products under proper storage and handling conditions.
RefSeq:	NP_001489
RefSeq Size:	3823



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RefSeq ORF: 1911

Synonyms: GCL; GCS; GLCL; GLCLC

Locus ID: 2729

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

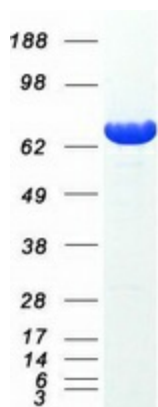
Cytogenetics: 6p12.1

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]).