

GCLC Antibody (N-term) Blocking peptide
Synthetic peptide
Catalog # BP11943a**Specification**

GCLC Antibody (N-term) Blocking peptide - Product InformationPrimary Accession [P48506](#)**GCLC Antibody (N-term) Blocking peptide - Additional Information****Gene ID** 2729**Other Names**Glutamate--cysteine ligase catalytic subunit, GCS heavy chain, Gamma-ECS,
Gamma-glutamylcysteine synthetase, GCLC, GLCL, GLCLC**Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

GCLC Antibody (N-term) Blocking peptide - Protein Information**Name** GCLC ([HGNC:4311](#))**Synonyms** GLCL, GLCLC**Function**

Catalyzes the ATP-dependent ligation of L-glutamate and L- cysteine and participates in the first and rate-limiting step in glutathione biosynthesis.

GCLC Antibody (N-term) Blocking peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Blocking Peptides](#)

GCLC Antibody (N-term) Blocking peptide - Images**GCLC Antibody (N-term) Blocking peptide - Background**

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.

GCLC Antibody (N-term) Blocking peptide - References

Man, B.L., et al. J Clin Neurosci 17(10):1244-1247(2010) Jia, P., et al. Schizophr. Res. 122 (1-3), 38-42 (2010) :Le, T.M., et al. Mol. Genet. Metab. 101(1):55-61(2010) Fullerton, J.M., et al. Bipolar Disord 12(5):550-556(2010) Wang, X., et al. PLoS ONE 5 (8), E11934 (2010) :