

Rabbit anti-Human GCLC Polyclonal Antibody | anti-GCLC antibody

GCLC Antibody (N-term)

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA288740	Rabbit	Human	Flow Cytometry, Functional Assay, Immunofluorescence, Immunohistochemistry, ELISA, Western Blot

PRODUCT SYNONYMS

GCLC; Polyclonal Antibody; GCLC Antibody (N-term); Glutamate--cysteine ligase catalytic subunit; GCS heavy chain; Gamma-ECS; Gamma-glutamylcysteine synthetase; GLCL; GLCLC; anti-GCLC antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Isotype	Rabbit Ig
Specificity	This GCLC antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from the N-terminal region of human GCLC.
Purity/Purification	Peptide Affinity Purified Rabbit Polyclonal Antibody (Pab)
Form/Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Concentration	Vial Concentration: 0.49 (varies by lot)
Sequence Positions	1-30
Sequence Length	599
Applicable Applications for anti-GCLC antibody	FCM/FACS (Flow Cytometry), IF (Immunofluorescence), IHC (Immunohistochemistry), ELISA, WB (Western Blot)
Antigen Type	Synthetic Peptide
Antigen Source	HUMAN
Preparation and Storage	Maintain refrigerated at 2-8 degree C for up to 6 months. For long term storage store at -20 degree C in small aliquots to prevent freeze-thaw cycles.

IMAGES



FCM/FACS (Flow Cytometry)

GCLC Antibody (N-term) flow cytometric analysis of Jurkat cells (right histogram) compared to a negative control cell (left histogram). FITC-conjugated donkey-anti-rabbit secondary antibodies were used for the analysis.



IF (Immunofluorescence)

Confocal immunofluorescent analysis of GCLC Antibody (N-term) with U-251MG cell followed by Alexa Fluor 488-conjugated goat anti-rabbit IgG (green). DAPI was used to stain the cell nuclear (blue).



IHC (Immunohistochemistry)

GCLC Antibody (N-term) immunohistochemistry analysis in formalin fixed and paraffin embedded human esophageal carcinoma followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of GCLC Antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.



WB (Western Blot)

GCLC Antibody (N-term) western blot analysis in Jurkat cell line lysates (35ug/lane). This demonstrates the GCLC antibody detected the GCLC protein (arrow).

ADDITIONAL INFORMATION

Related Product Information for anti-GCLC antibody	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.
Product Categories/Family for anti-GCLC antibody	Cell Biology ; Metabolism ; Signal transduction
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) :

NCBI AND UNIPROT INFORMATION

NCBI GI #	308199423
NCBI GeneID	2729
NCBI Accession #	NP_001184044.1 ; NP_001489.1
NCBI GenBank Nucleotide #	NM_001197115.1
UniProt Accession #	P48506 ; Q14399
Molecular Weight	72766
NCBI Official Full Name	glutamate--cysteine ligase catalytic subunit isoform b
NCBI Official Synonym Full Names	glutamate-cysteine ligase, catalytic subunit
NCBI Official Symbol	GCLC
NCBI Official Synonym Symbols	GCL; GCS; GLCL; GLCLC
NCBI Protein Information	glutamate--cysteine ligase catalytic subunit
UniProt Protein Name	Glutamate--cysteine ligase catalytic subunit
UniProt Gene Name	GCLC
UniProt Synonym Gene Names	GLCL; GLCLC
UniProt Entry Name	GSH1_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

