

Product datasheet for **TA335009**

GCLC Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	WB
Recommended Dilution:	WB
Reactivity:	Human, Mouse
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	The immunogen for anti-GCLC antibody: synthetic peptide directed towards the N terminal of human GCLC. Synthetic peptide located within the following region: VLETLQEKGERTNPNHPTLWRPEYGSYMIEGTPGQPYGGTMSEFNTVEAN
Formulation:	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose. <i>Note that this product is shipped as lyophilized powder to China customers.</i>
Purification:	Affinity Purified
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	73 kDa
Gene Name:	glutamate-cysteine ligase catalytic subunit
Database Link:	NP_001489 Entrez Gene 14629 Mouse Entrez Gene 2729 Human P48506



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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. GCLC is the catalytic subunit of 637 amino acids with a calculated molecular weight of 72.773 kDa. Deficiency of gamma-glutamylcysteine synthetase in human is associated with enzymopathic hemolytic anemia. 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. The gene encoding the catalytic subunit encodes a protein of 367 amino acids with a calculated molecular weight of 72.773 kDa and maps to chromosome 6. The regulatory subunit is derived from a different gene located on chromosome 1p22-p21. Deficiency of gamma-glutamylcysteine synthetase in human is associated with enzymopathic hemolytic anemia. Publication Note: This RefSeq record includes a subset of the publications that are available for this gene. Please see the Entrez Gene record to access additional publications.

Synonyms:

GCL; GCS; GLCL; GLCLC

Note:

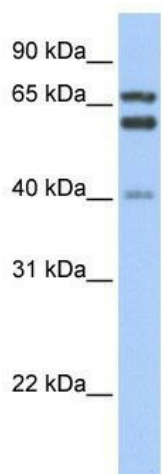
Immunogen Sequence Homology: Dog: 100%; Pig: 100%; Rat: 100%; Human: 100%; Mouse: 100%; Bovine: 100%; Rabbit: 100%; Guinea pig: 100%; Horse: 93%; Zebrafish: 79%

Protein Families:

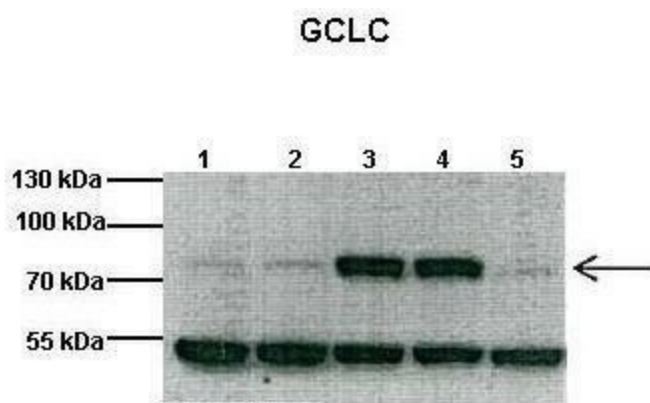
Druggable Genome

Protein Pathways:

Glutathione metabolism, Metabolic pathways

Product images:

WB Suggested Anti-GCLC Antibody Titration: 0.2-1 ug/ml; Positive Control: Human Liver



Lanes: 1: 40ug mouse heart lysate, 2: 40ug mouse heart lysate, 3: 40ug mouse heart lysate, 4: 40ug mouse heart lysate, 5: 40ug mouse heart lysate; Primary Antibody Dilution: 1: 1000; Secondary Antibody: Anti-rabbit HRP; Secondary Antibody Dilution: 1: 100