

# GCLM Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a full length recombinant GCLM.

Catalog # AT2177a

## Product Information

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<b>Application</b>	WB, E
<b>Primary Accession</b>	<a href="#">P48507</a>
<b>Other Accession</b>	<a href="#">BC041809</a>
<b>Reactivity</b>	Human
<b>Host</b>	mouse
<b>Clonality</b>	monoclonal
<b>Isotype</b>	IgG2a Kappa
<b>Clone Names</b>	2B8
<b>Calculated MW</b>	30727

## Additional Information

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<b>Gene ID</b>	2730
<b>Other Names</b>	Glutamate--cysteine ligase regulatory subunit, GCS light chain, Gamma-ECS regulatory subunit, Gamma-glutamylcysteine synthetase regulatory subunit, Glutamate--cysteine ligase modifier subunit, GCLM, GLCLR
<b>Target/Specificity</b>	GCLM (AAH41809, 1 a.a. ~ 274 a.a) full-length recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
<b>Dilution</b>	WB~~1:500~1000 E~~N/A
<b>Format</b>	Clear, colorless solution in phosphate buffered saline, pH 7.2 .
<b>Storage</b>	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.
<b>Precautions</b>	GCLM Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

## Background

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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. Gamma glutamylcysteine synthetase deficiency has been implicated in some forms of hemolytic anemia.

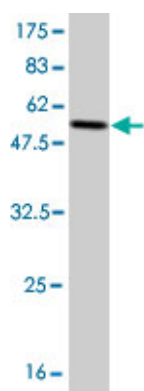
## References

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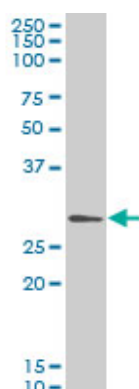
1. Protection against 2-chloroethyl ethyl sulfide (CEES) - Induced cytotoxicity in human keratinocytes by an

inducer of the glutathione detoxification pathway. Abel EL, Bubel JD, Simper MS, Powell L, McClellan SA, Andreeff M, Macleod MC, Digiovanni J. *Toxicol Appl Pharmacol.* 2011 Jun 23. [Epub ahead of print]2. Molecular and Functional Characterization of Gastrula Organizer Cells Derived from Human Embryonic Stem Cells. Sharon N, Mor I, Golan-Lev T, Fainsod A, Benvenisty N. *Stem Cells.* 2011 Feb 15. doi: 10.1002/stem.621. [Epub ahead of print]3. Diversity in Antioxidant Response Enzymes in Progressive Stages of Human Nonalcoholic Fatty Liver Disease. Hardwick RN, Fisher CD, Canet MJ, Lake AD, Cherrington NJ. *Drug Metab Dispos.* 2010 Dec;38(12):2293-301. Epub 2010 Aug 30.4. Induction of Antioxidant Enzymes by Curcumin and Its Analogues in Human Islets: Implications in Transplantation. Balamurugan AN, Akhoy L, Selvaraj G, Pugazhenth S. *Pancreas.* 2009 May;38(4):454-60.

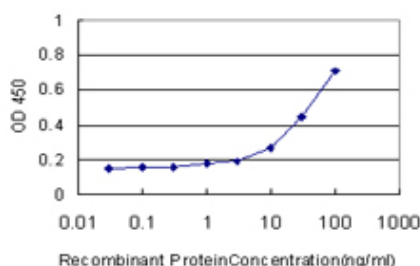
## Images



Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (55.88 KDa) .



GCLM monoclonal antibody (M01), clone 2B8 Western Blot analysis of GCLM expression in HeLa (Cat # AT2177a )



Detection limit for recombinant GST tagged GCLM is approximately 1 ng/ml as a capture antibody.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.