

GCLM Antibody (monoclonal) (M01)**Mouse monoclonal antibody raised against a full length recombinant GCLM.****Catalog # AT2177a****Specification**

GCLM Antibody (monoclonal) (M01) - Product Information

Application	WB, E
Primary Accession	P48507
Other Accession	BC041809
Reactivity	Human
Host	mouse
Clonality	Monoclonal
Isotype	IgG2a Kappa
Calculated MW	30727

GCLM Antibody (monoclonal) (M01) - Additional Information**Gene ID** 2730**Other Names**

Glutamate--cysteine ligase regulatory subunit, GCS light chain, Gamma-ECS regulatory subunit, Gamma-glutamylcysteine synthetase regulatory subunit, Glutamate--cysteine ligase modifier subunit, GCLM, GLCLR

Target/Specificity

GCLM (AAH41809, 1 a.a. ~ 274 a.a) full-length recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.

Dilution

WB~~1:500~1000

E~~N/A

Format

Clear, colorless solution in phosphate buffered saline, pH 7.2 .

Storage

Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

Precautions

GCLM Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

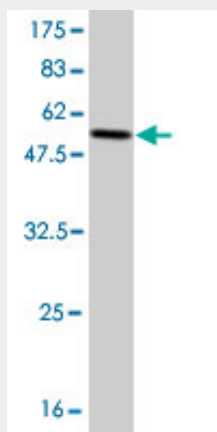
GCLM Antibody (monoclonal) (M01) - Protocols

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

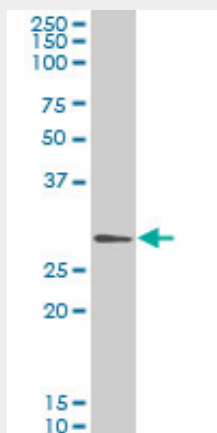
- [Western Blot](#)

- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

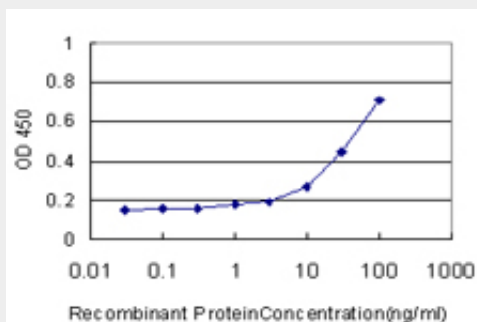
GCLM Antibody (monoclonal) (M01) - Images



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 1ng/ml as a capture antibody.

GCLM Antibody (monoclonal) (M01) - 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. Gamma glutamylcysteine synthetase deficiency has been implicated in some forms of hemolytic anemia.

GCLM Antibody (monoclonal) (M01) - References

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.