

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

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.

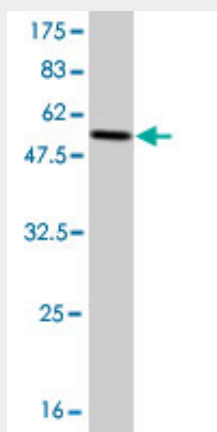
GCLM Antibody (monoclonal) (M01) - Protocols

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

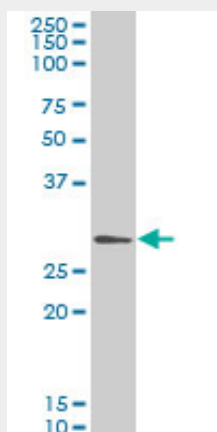
- [Western Blot](#)
- [Blocking Peptides](#)

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

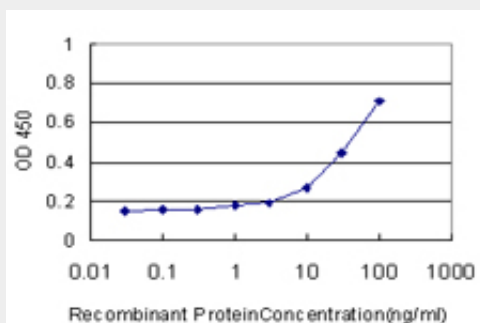
GCLM Antibody (monoclonal) (M01) - Images



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.