

## ME1 Antibody (monoclonal) (M02)

Mouse monoclonal antibody raised against a full length recombinant ME1.

Catalog # AT2829a

### Product Information

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<b>Application</b>	WB, E
<b>Primary Accession</b>	<a href="#">P48163</a>
<b>Other Accession</b>	<a href="#">BC025246</a>
<b>Reactivity</b>	Human
<b>Host</b>	mouse
<b>Clonality</b>	monoclonal
<b>Isotype</b>	IgG2b Kappa
<b>Clone Names</b>	3B4
<b>Calculated MW</b>	64150

### Additional Information

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<b>Gene ID</b>	4199
<b>Other Names</b>	NADP-dependent malic enzyme, NADP-ME, Malic enzyme 1, ME1
<b>Target/Specificity</b>	ME1 (AAH25246, 1 a.a. ~ 572 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>	ME1 Antibody (monoclonal) (M02) is for research use only and not for use in diagnostic or therapeutic procedures.

### Background

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This gene encodes a cytosolic, NADP-dependent enzyme that generates NADPH for fatty acid biosynthesis. The activity of this enzyme, the reversible oxidative decarboxylation of malate, links the glycolytic and citric acid cycles. The regulation of expression for this gene is complex. Increased expression can result from elevated levels of thyroid hormones or by higher proportions of carbohydrates in the diet.

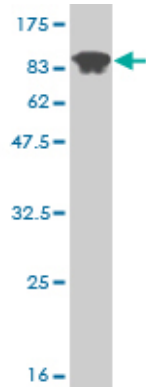
### References

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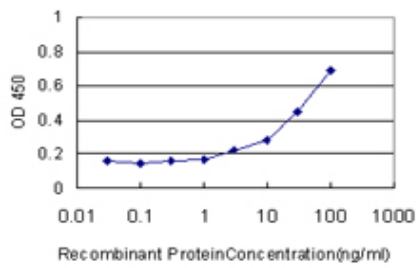
Long-range interaction between the enzyme active site and a distant allosteric site in the human mitochondrial NAD(P)+-dependent malic enzyme. Hsieh JY, et al. Arch Biochem Biophys, 2009 Jul 1. PMID 19464998. Functional roles of the tetramer organization of malic enzyme. Hsieh JY, et al. J Biol Chem, 2009 Jul

3. PMID 19416979.Role for malic enzyme, pyruvate carboxylation, and mitochondrial malate import in glucose-stimulated insulin secretion. Heart E, et al. Am J Physiol Endocrinol Metab, 2009 Jun. PMID 19293334.Multiple genetic variants along candidate pathways influence plasma high-density lipoprotein cholesterol concentrations. Lu Y, et al. J Lipid Res, 2008 Dec. PMID 18660489.Toward a confocal subcellular atlas of the human proteome. Barbe L, et al. Mol Cell Proteomics, 2008 Mar. PMID 18029348.

## Images



Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (88.66 KDa) .



Detection limit for recombinant GST tagged ME1 is approximately 3ng/ml as a capture antibody.

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