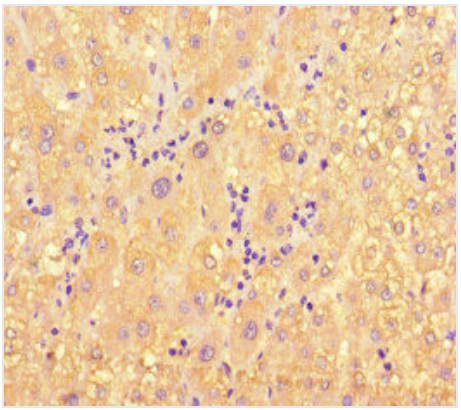
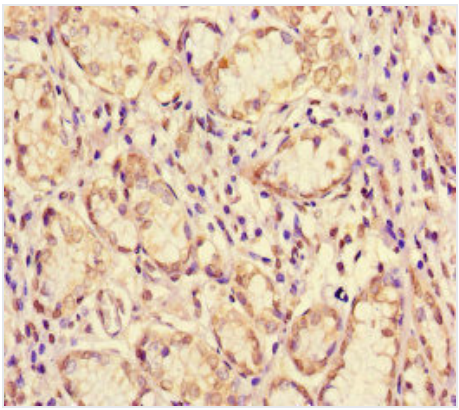
ME1 Antibody – Rabbit Polyclonal

PRODUCT OVERVIEW

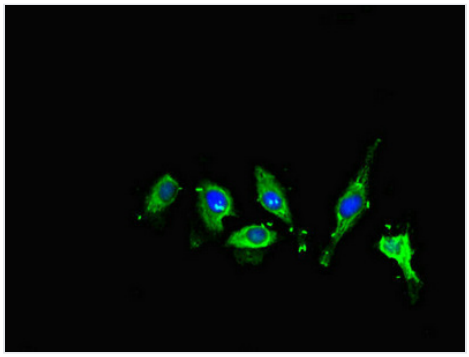
Product Name	ME1, Polyclonal Antibody
Full Product Name	ME1 Antibody
Product Gene Name	anti-ME1 antibody
Product Synonym Names	NADP-dependent malic enzyme; Malic enzyme 1; ME1
Clonality	Polyclonal
Isotype	IgG
Host	Rabbit
Species Reactivity	Human
Form/Format	Liquid
Purity/Purification	>95%, Protein G purified
Preparation and Storage	Shipped at 4 degree C. Upon delivery aliquot and store at -20 degree C or -80 degree C. Avoid repeated freeze.
Matching Pairs	Unconjugated Antibody: ME1 (MBS7045967) HRP Conjugated Antibody: ME1 (MBS7043621)
Matching Pairs	Unconjugated Antibody: ME1 (MBS7045967) Biotin Conjugated Antibody: ME1 (MBS7043877)
Matching Pairs	Unconjugated Antibody: ME1 (MBS7045967) FITC Conjugated Antibody: ME1 (MBS7045901)
Molecular Weight	55,165 Da
OMIM	154250
3D Structure	ModBase 3D Structure for P48163
Species	Human
Immunogen	Recombinant human NADP-dependent malic enzyme protein
Conjugate	Non-conjugated
Buffer	Preservative: 0.03% Proclin 300 Constituents: 50% Glycerol, 0.01M PBS, PH 7.4
Santa Cruz Alternative	Potential replacement for Santa Cruz Biotechnology antibody catalog# sc-168571 / sc-135303
ISO Certification	Manufactured in an ISO 9001:2015 Certified Laboratory.
Applications Tested/Suitable for anti-ME1 antibody	ELISA (EIA), Immunohistochemistry (IHC), Immunofluorescence (IF)
Related Product Information for anti-ME1 antibody	cytosol, ADP binding, electron carrier activity, malate dehydrogenase (decarboxylating) (NADP+) activity, malic enzyme activity, manganese ion binding, NAD binding, NADP binding, carbohydrate metabolic process, malate metabolic process
Other Notes	Small volumes of anti-ME1 antibody vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.
Searchable Terms for ME1 purchase	MBS7045967 is an antibody targeting ME1. Also known as ME1 Antibody. Reactive in Human. Host: Rabbit.



Immunohistochemistry (IHC) of anti-ME1 antibody
Immunohistochemistry of paraffin-embedded human liver tissue using MBS7045967 at dilution of 1:100



Immunohistochemistry (IHC) of anti-ME1 antibody
Immunohistochemistry of paraffin-embedded human gastric cancer using MBS7045967 at dilution of 1:100



Immunohistochemistry (IHC) of anti-ME1 antibody
Immunofluorescent analysis of Hela cells using MBS7045967 at a dilution of 1:100 and Alexa Fluor 488-congugated AffiniPure Goat Anti-Rabbit IgG(H+L)

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for ME1. It may not necessarily be applicable to this product.

NCBI GI #	4505143
NCBI GeneID	4199
NCBI Accession #	NP_002386.1
UniProt Primary Accession #	P48163
UniProt Secondary Accession #	Q16797; Q16855; Q53F72; Q5VWA2; Q9BWX8; Q9H1W3; Q9UIY4; B4DZ70
UniProt Related Accession #	P48163
GenBank Nucleotide #	NM_002395.5
NCBI Official Full Name	NADP-dependent malic enzyme
NCBI Official Synonym Full Names	malic enzyme 1
NCBI Official Symbol	ME1
NCBI Official Synonym Symbols	MES; HUMNDME
UniProt Protein Name	NADP-dependent malic enzyme
UniProt Synonym Protein Names	Malic enzyme 1
Protein Family	NADP-dependent malic enzyme
UniProt Gene Name	ME1

UniProt Synonym Gene Names	NADP-ME
UniProt Entry Name	MAOX_HUMAN
NCBI Protein Information	NADP-dependent malic enzyme
NCBI Summary for ME1	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. [provided by RefSeq, Jul 2008]
UniProt Comments for ME1	ME1: a ubiquitous lipogenic enzyme of the malic enzymes family. Converts (S)-malate + NADP+ ?? pyruvate + CO2 + NADPH. Levels of ME1 and ATP-citrate lyase mRNA, another lipogenic enzyme, are coordinately increased 5-7 fold during the differentiation of 3T3-L1 preadipocytes into adipocytes. Up-regulated by short-term dietary restriction in mice. The cycling of pyruvate by ME1 generates cytosolic NADPH, whereas mitochondrial ME2 responds to elevated amino acids and serves to supply sufficient pyruvate for increased Krebs cycle flux when glucose is limiting. Protein type: EC 1.1.1.40; Oxidoreductase; Carbohydrate Metabolism - pyruvate Chromosomal Location of Human Ortholog: 6q12 Cellular Component: cytosol Molecular Function: ADP binding; electron carrier activity; malate dehydrogenase (oxaloacetate-decarboxylating) (NADP+) activity; malic enzyme activity; manganese ion binding; NAD binding; NADP binding Biological Process: malate metabolic process; NADP biosynthetic process; response to carbohydrate stimulus; response to hormone stimulus
Research Articles on ME1	**1.** ME1 expression was found to be mutant-KRAS-associated in NSCLC cancer cell lines. Patients with elevated ME1 had worse outcomes after radiotherapy. Transamination generating cytosolic NADPH via ME1 may contribute to radioresistance.
Precautions	All of MyBioSource's Products are for scientific laboratory research purposes and are not for diagnostic, therapeutics, prophylactic or in vivo use. Through your purchase, you expressly represent and warrant to MyBioSource that you will properly test and use any Products purchased from MyBioSource in accordance with industry standards. MyBioSource and its authorized distributors reserve the right to refuse to process any order where we reasonably believe that the intended use will fall outside of our acceptable guidelines.
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