ME1 Peptide - N-Terminal Region Blocking Peptide

PRODUCT OVERVIEW

Product Name	ME1, Blocking Peptide
Full Product Name	ME1 Peptide - N-terminal region
Product Gene Name	ME1 blocking peptide
Product Synonym Gene Name	HUMNDME; MES
Form/Format	Lyophilized powder
Preparation and Storage	Add 100ul of sterile PBS. Final peptide concentration is 1 mg/ml in PBS. For longer periods of storage, store at -20 degree C. Avoid repeat freeze-thaw cycles.
Antibody/Peptide Pairs	ME1 peptide (MBS3226197) is used for blocking the activity of ME1 antibody (MBS3201171)
Molecular Weight	64kDa
OMIM	154250
Product Categories/Family for ME1 blocking peptide	Peptide
Applications Tested/Suitable for ME1 blocking peptide	Immunohistochemistry (IHC), Western Blot (WB)
Related Product Information for ME1 blocking peptide	This is a synthetic peptide designed for use in combination with anti-ME1 antibody made Target Description: ME1 is 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.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. Publication Note: This RefSeq record includes a subset of the publications that are available for this gene. Please see the Entrez Gene record to access additional publications.
Other Notes	Small volumes of ME1 blocking peptide 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	MBS3226197 is a blocking peptide targeting ME1. Also known as ME1 Peptide - N-terminal region.

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
UniProt Primary Accession #	P48163
UniProt Related Accession #	P48163
GenBank Nucleotide #	NM_002395

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: Carbohydrate Metabolism - pyruvate; EC 1.1.1.40; Oxidoreductase Chromosomal Location of Human Ortholog: 6q12 Cellular Component: mitochondrion; cytosol Molecular Function: malate dehydrogenase (decarboxylating) activity; malic enzyme activity; electron carrier activity; manganese ion binding; malate dehydrogenase (oxaloacetate-decarboxylating) (NADP+) activity; NADP binding; ADP binding; NAD binding; oxaloacetate decarboxylase activity Biological Process: malate metabolic process; carbohydrate metabolic process; response to hormone stimulus; cellular lipid metabolic process; NADP biosynthetic process; protein tetramerization; response to carbohydrate stimulus
Research Articles on ME1	**1.** Bioinformatics analysis identified that miR612 targeted ME1, which expression was high and inversely associated with miR612 expression in bladder cancer tissues.
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