

## Product Information

<b>Product Name:</b>	Recombinant Human ME3
<b>Synonym(s):</b>	NADP-dependent malic enzyme (mitochondrial), NADP-ME, Malic enzyme 3
<b>Catalog Number:</b>	NU03054
<b>Description:</b>	Malic enzyme catalyzes the oxidative decarboxylation of malate to pyruvate using either NAD <sup>+</sup> or NADP <sup>+</sup> as a cofactor. Mammalian tissues contain 3 distinct isoforms of malic enzyme: a cytosolic NADP(+)-dependent isoform, a mitochondrial NADP(+)-dependent isoform, and a mitochondrial NAD(+)-dependent isoform. This gene encodes a mitochondrial NADP(+)-dependent isoform. Multiple alternatively spliced transcript variants have been found for this gene, but the biological validity of some variants has not been determined. [provided by RefSeq, Jul 2008].
<b>Expression Source:</b>	<i>E. coli</i>
<b>Molecular Weight:</b>	65.7 kDa
<b>Purity:</b>	95 % or more by SDS-PAGE



**Tag:** His-Tag C-terminus  
**UnitProt #:** P23368  
**Formulation:** 30 mM Tris pH 7.4, 500 mM NaCl, 10% glycerol, 3mM MgCl<sub>2</sub>, 5mM beta-mercaptoethanol, 1mM PMSF, 1mM Benzamidine  
**Reconstitution:** Clear solution in 30 mM Tris, pH7.4, 150 mM NaCl, 40% glycerol, 5 mM DTT  
**Application:** Binding assay, small molecule inhibitor screening, substrate of kinase, antigen, ELISA, Western blot, crystallization, and co-crystallization studies.  
**Storage and Stability:** Upon delivery aliquot and store at -80 °C. Avoid multiple freeze-thaw cycles. The protein is stable for 12 months at -80 °C, for 2-4 weeks at 4°C.

### Amino Acid Sequence

MTPTAPAQGCHSKPGPARPVPLKKGVDVTRNPHLNKGMAFTLEERLQLGIHGLIPPCFLSQDVQLLRIMRYERQQ  
SDLDKYIILMTLQDRNEKLFYRVLTSDVEKFMPIVYTPTVGLACQHYGLTFRRPRGLFITIHDKGHLATMLNSWPED  
NIKAVVVTDGERILGLGDLGCYGMGIPVGKLALYTACGGVNPQQCLPVLLDVGTNNEELLRDPLYIGLKHQRVHGKA  
YDDLLEDFMQAVTDKFGINCLIQFEDFANANAFRLLNKYRNKYCMFNDDIQGTASVAVAGIILAALRITKNKLSNHVF  
VFQGAGEAAMGIAHLLVMALEKEGVPKAEATRKIWMVDSKGLIVKGRSHLNHEKEMFAQDHPVNSLEEVVRLVKPT  
AIIIGVAAIAGAFTEQILRDMASFHERPIIFALSNPTSKAECTAEKCYRVTEGRGIFASGSPFKSVTLEDGKTFIPGQ  
GNNAYVFPGVALGVIAGGIRHIPDEIFLLTAEQIAQEVSEQHLSQGRLYPPLSTIRDVSLRIAIAIKVLDYAYKHNLAS  
YYPEPKDKEAFVRSLSVYTPDYDSFTLDSYTPWKEAMNVQTVLEHHHHHH

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