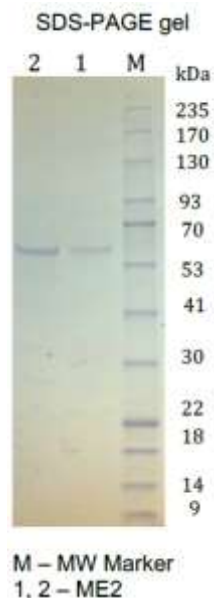


## Product Information

<b>Product Name:</b>	Recombinant Human ME2
<b>Synonym(s):</b>	NAD-dependent malic enzyme (mitochondrial), Malic enzyme 2
<b>Catalog Number:</b>	NU03053
<b>Description:</b>	Mitochondrial NAD-dependent malic enzyme (ME2) is a homotetrameric protein that catalyzes the oxidative decarboxylation of malate to pyruvate. It had previously been weakly linked to a syndrome known as Friedreich ataxia that has since been shown to be the result of mutation in a completely different gene. Certain single-nucleotide polymorphism haplotypes of this gene have been shown to increase the risk for idiopathic generalized epilepsy. Alternatively spliced transcript variants encoding different isoforms found for this gene. [provided by RefSeq, Dec 2009]
<b>Expression Source:</b>	<i>E. coli</i>
<b>Molecular Weight:</b>	64.4 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

MIKEKGGKPLMLNPRTNKGMAFTLQERQMLGLQGLLPPKIETQDIQALRFHRNLKKMTSPLEKYIYIMGIQERNEKLF  
YRILQDDIESLMPIVYTPTVGLACSQYGHIFRRPKGLFISISDRGHVRSIVDNWPENHVKAVVVT DGERILGLGDLG  
VYGMGIPVGGKLCCLYTACAGIRPDRCLPVCIDVGTDNIALLLKDPFYMGLYQKRDRTQQYDDLIDEFMKAITDRYGRNT  
LIQFEDFGNHNAFRFLRKYREKYCTFNDDIQGTAVALAGLLAAQKVISKPISEHKILFLGAGEAALGIANLIVMSM  
VENGLSEQEAQKKIWMFDKYGLLVKGRKAKIDSYQEPFTHSAPESIPDTFFEDAVNILKPSTIIGVAGAGRLFTPDI  
RAMASINERPVI FALSNPQAECTAEEAYTLTEGRCLFASGSPFGPVKLT DGRVFTPGQGNVYIFPGVALAVILC  
NTRHISDSVFLEAAKALTSQLTDEELAQRGLYPPLANIQEV SINIAIKVTEYLYANKMAFRYPEPEDKAKYVKERTW  
RSEYDSSLDPVYEWPESSASSPPVITELEHHHHHH

**Nacalai USA, Inc.**  
TEL: (858) 404-0403  
Email: [info@nacalaiusa.com](mailto:info@nacalaiusa.com)