

## 32-6840: MDH2 Mouse

**Application :** Functional Assay  
**Alternative Name :** M-MDH, MDH, MOR1.

### Description

Source: Escherichia Coli.

Sterile Filtered colorless solution.

MDH2 catalyzes the reversible oxidation of malate to oxaloacetate, utilizing the NAD/NADH cofactor system in the citric acid cycle. MDH2 is localized to the mitochondria and takes part in the malate-aspartate shuttle that functions in the metabolic coordination between cytosol and mitochondria. MDH2 is highly expressed in the adrenal system, small intestine, heart and pancreas.

MDH2 Mouse Recombinant produced in E.Coli is a single, non-glycosylated polypeptide chain containing 335 amino acids (25-338a.a.) and having a molecular mass of 35.4kDa. MDH2 is fused to a 21 amino acid His-tag at N-terminus & purified by proprietary chromatographic techniques.

### Product Info

**Amount :** 2 µg / 10 µg  
**Purification :** Greater than 95.0% as determined by SDS-PAGE.  
**Content :** MDH2 protein solution (1mg/ml) containing Phosphate buffered saline (pH7.4) and 20% glycerol.  
**Storage condition :** Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.  
**Amino Acid :** MGSSHHHHHH SSGLVPRGSH MAKVAVLGAS GGIGQPLSLL LKNSPLVSRL TLYDIAHTPG VAADLSHIET  
RANVKGYLGP EQLPDCLKGC DVVVIPAGVP RKP G MTRDDL FNTNATIVAT LTAACAQHCP EAMVCIANP  
VNSTIPITAE VFKKHGVYNP NKIFGVTTLD IVRANTFVAE LKGLDPARVN VPVIGGHAGK TIPLISQCT  
PKVDFPQDQL ATLTGRIQEA GTEVVKAKAG AGSATLSMAY AGARFVFSLV DAMNGKEGVV ECSFVQSKET  
ECTYFSTPLL LGKKGLEKNL GIGKITPFEE KMIAEAIPEL KASIKKGEDF VKNMK.

### Application Note

Specific activity is > 800 units/mg, and is defined as the amount of enzyme that cleaves 1umole of oxaloacetate and beta-NADH to Lmalate and beta-NAD per minute at pH8.0 at 37°C.