

## 32-2528: MDH2 Recombinant Protein

Alternative Name : M-MDH, MDH, MOR1.

## Description

Source : Escherichia Coli. MDH2 Human Recombinant produced in E.Coli is a single, non-glycosylated polypeptide chain containing 335 amino acids (25-338 a.a.) and having a molecular mass of 35.2 kDa. The MDH2 is fused to a 21 amino acid His tag at N-terminus and purified by conventional chromatography. 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 highy expressed in the adrenal system, small intestine, heart and pancreas.

## **Product Info**

Amount : Purification :	10 μg Greater than 95.0% as determined by SDS-PAGE.
Content :	The MDH2 1mg/ml protein solution contains 20mM Tris-HCl pH-7.5 and 10% glycerol.
Storage condition :	MDH2 although stable 4°C for 4 weeks, should be stored desiccated below -18°C. 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 KAAVKGYLGP EQLPDCLKGC DVVVIPAGVP RKPGMTRDDL FNTNATIVAT TAACAQHCP EAMICVIANP VNSTIPITAE VFKKHGVYNP NKIFGVTTLD IVRANTFVAE LKGLDPARVN VPVIGGHAGK TIIPLISQCT PKVDFPQDQL TALTGRIQEA GTEVVKAKAG AGSATLSMAY AGARFVFSLV DAMNGKEGVV ECSFVKSQET ECTYFSTPLL LGKKGIEKNL GIGKVSSFEE KMISDAIPEL KASIKKGEDF VKTLK.

## **Application Note**

Specific activity is > 30 units/mg, and is defined as the amount of enzyme that cleaves 1umole of oxalacetate and beta-NADH to L-malate and beta-NAD per minute at pH7.5 at  $25\tilde{A}$ ] $\hat{A}^{\circ}C$ .

