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## 32-2526: MDH1 Recombinant Protein

Alternative Name: MDH-s,MDHA,MOR2.

## **Description**

Source: Escherichia Coli. MDH1 Human Recombinant produced in E.Coli is a single, non-glycosylated polypeptide chain containing 342 amino acids (1-334 a.a.) and having a molecular mass of 37.4 kDa. The MDH1 is fused to an 8 amino acid His tag at C-terminus and purified by conventional chromatography. MDH1 catalyzes the reversible oxidation of malate to oxaloacetate, using the NAD/NADH cofactor system in the citric acid cycle. MDH1 is abundantly found in the cytoplasm and is involved in the malate-aspartate shuttle that functions in the metabolic coordination between cytosol and mitochondria. MDH1 regulates p53-dependent cell-cycle arrest and apoptosis in response to glucose deprivation.

## **Product Info**

Amount:  $25 \mu g$ 

**Purification:** Greater than 95.0% as determined by SDS-PAGE.

**Content:** The MDH1 1mg/ml protein solution contains 20mM Tris-HCl pH-8, and 10% glycerol.

MDH1 although stable 4°C for 4 weeks, should be stored desiccated below -18°C. For long term

**Storage condition :** storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-

thaw cycles.

Amino Acid: MSEPIRVLVT GAAGQIAYSL LYSIGNGSVF GKDQPIILVL LDITPMMGVL DGVLMELQDC ALPLLKDVIA

TDKEDVAFKD LDVAILVGSM PRREGMERKD LLKANVKIFK SQGAALDKYA KKSVKVIVVG NPANTNCLTA SKSAPSIPKE NFSCLTRLDH NRAKAQIALK LGVTANDVKN VIIWGNHSST QYPDVNHAKV KLQGKEVGVY EALKDDSWLK GEFVTTVQQR GAAVIKARKL SSAMSAAKAI CDHVRDIWFG TPEGEFVSMG VISDGNSYGV

PDDLLYSFPV VIKNKTWKFV EGLPINDFSR EKMDLTAKEL TEEKESAFEF LSSALEHHHH HH.

## **Application Note**

Specific activity is > 8 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  $25\tilde{A} \cap \hat{A}^{\circ}C$ .

