# Bacterial Recombinant MDH

**CATALOG #:** 6357-100 100 µg

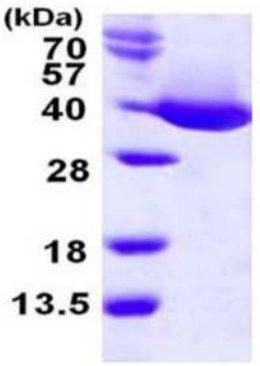
**ALTERNATE NAMES:** Malate dehydrogenase, ECK3225, JW3205.

**SOURCE:** E.Coli

**PURITY:** > 95% by SDS - PAGE

**MOL. WEIGHT:** 34.9 kDa (336 aa, 1-312 aa + NT His Tag)

**FORMULATION:** 1 mg/ml solution in 20 mM Tris-HCl (pH 8.0) containing 1 mM DTT, 50 mM NaCl and 10% glycerol.




15% SDS-PAGE (3ug)

Bacterial Recombinant MDH

**STORAGE CONDITIONS:**
Can be stored at 4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.

**DESCRIPTION**:
Malate dehydrogenase (MDH) belongs to the LDH/MDH superfamily and MDH type 1 family. This enzyme catalyzes the conversion of malate into oxaloacetate (using $NAD^+$) and vice versa (reversible reaction). This reaction is part of many metabolic pathways, including the citric acid cycle. Malate dehydrogenase is also involved in gluconeogenesis, the synthesis of glucose from smaller molecules.

**AMINO ACID SEQUENCE:**
MGSSHHHHHH SSGLVPRGSH MGSHMKVAVL GAAGGIGQAL ALLLKTQLPS GSELSLYDIA PVTPGVAVDL SHIPTAVKIK GFSGEDATPA LEGADVVLIS AGVARKPGMD RSDLFNVNAG IVKNLVQQVA KTCPKACIGI ITNPVNTTVA IAAEVLKKAG VYDKNKLFGV TTLDIIRSNT FVAELKGKQP GEVEVPVIGG HSGVTILPLL SQVPGVSFTE QEVADLTKRI QNAGTEVVEA KAGGGSATLS MGQAAARFGL SLVRALQGEQ GVVECAYVEG DGQYARFFSQ PLLLGKNGVE ERKSIGTLSA FEQNALEGML DTLKKDIALG EEFVNK

**BIOLOGICAL ACTIVITY:**
Specific activity is > 450 units/mg, and is defined as the amount of enzyme that cleaves 1 µmole of oxaloacetate and beta-NADH to L-malate and beta-NAD per minute at pH 7.5 at 25°C

**RELATED PRODUCTS:**

- Malate assay kit **(Cat. No. K637-100)**
- Human recombinant MDH1 **(Cat. No. 6355-100)**
- Human recombinant MDH2 **(Cat. No. 6356-50)**

***FOR RESEARCH USE ONLY! Not to be used in humans.***