

Product datasheet for AR50312PU-N

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mdh (1-312, His-tag) Escherichia coli Protein

Product data:

Product Type: Recombinant Proteins

Description: mdh (1-312, His-tag) recombinant protein, 0.5 mg

Species: Escherichia coli

Expression Host: E. coli

Expression cDNA Clone

MGSSHHHHHH SSGLVPRGSH MGSHMKVAVL GAAGGIGQAL ALLLKTQLPS GSELSLYDIA or AA Sequence: 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

Tag: His-tag Predicted MW: 34.9 kDa Concentration: lot specific

Purity: >95% by SDS - PAGE

Buffer: Presentation State: Purified

State: Liquid purified protein

Buffer System: 20 mM Tris-HCl buffer (pH 8.0) containing 1 mM DTT, 10% glycerol, 50 mM

NaCl

Bioactivity: Specific: > 450 units/mg. Defined as the amount of enzyme that cleaves 1 umole of

oxalacetate and beta - NADH to L - malate and beta - NAD per minute at pH 7.5 at 25°C.

Activity Assay:

1. Prepare a 1.45 ml assay bu ffer . The final concentrations are 100 mM Potassium phosphate, 0.13mM beta - nicotinamide adenine dinucleotide, reduced form, 0.25mM

oxalacetic acid.

2. Add 50 µl of recombinant MDH protein with various concentrat ions (0. 015 µg, 0. 03 µg) in

assay buffer.

3. Mix by inversion and record the decrease at A340nm for approximately 5 minutes

Preparation: Liquid purified protein

Protein Description: Recombinant E.coli mdh protein, fused to His-tag at N-terminus, was expressed in E.coli and

purified by using conventional chromatography techniques.



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Storage: Store undiluted at 2-8°C for one week or (in aliquots) at -20°C to -80°C for longer.

Avoid repeated freezing and thawing.

Stability: Shelf life: one year from despatch.

Summary: 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 (this is a reversible reaction). Malate dehydrogenase is also involved in

gluconeogenesis, the synthesis of glucose from smaller molecules.

Product images:

