

Product datasheet for **AR50312PU-S**

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

Product data:

Product Type:	Recombinant Proteins
Description:	mdh (1-312, His-tag) recombinant protein, 0.1 mg
Species:	Escherichia coli
Expression Host:	E. coli
Expression cDNA Clone or AA Sequence:	<u>MGSSHHHHHH SSSLVPRGSH MGS</u> HMKVAVL GAAGGIGQAL ALLLKTQLPS GSELSLYDIA PVTPGVAVDL SHIPTAVKIK GFSGEDATPA LEGADVLLIS AGVARKPGMD RSDLFNVNAG IVKNLVQQVA KTCPKACIGI ITNPVNTTVA IAAEVLKKAG VYDKNKLFGV TTLDIIRSNT FVAELKGKQP GEVEVPVIGG HSGVTILPLL SQVPGVSFTE QEVDLTKRI QNAGTEWEA KAGGGSATLS MGQAAARFGL SLVRALQGEQ GWECAYVEG 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 buffer. 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 concentrations (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: