

Product datasheet for AR09617PU-L

OriGene Technologies, Inc.

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MDH2 (25-338, His-tag) Human Protein

Product data:

Product Type: Recombinant Proteins

Description: MDH2 (25-338, His-tag) human recombinant protein, 0.25 mg

Species: Human **Expression Host:** E. coli

Expression cDNA Clone

MGSSHHHHHH SSGLVPRGSH MAKVAVLGAS GGIGQPLSLL LKNSPLVSRL TLYDIAHTPG or AA Sequence: VAADLSHIET KAAVKGYLGP EQLPDCLKGC DVVVIPAGVP RKPGMTRDDL FNTNATIVAT

> LTAACAQHCP EAMICVIANP VNSTIPITAE VFKKHGVYNP NKIFGVTTLD IVRANTFVAE LKGLDPARVN VPVIGGHAGK TIIPLISQCT PKVDFPQDQL TALTGRIQEA GTEVVKAKAG AGSATLSMAY AGARFVFSLV DAMNGKEGVV ECSFVKSQET ECTYFSTPLL LGKKGIEKNL GIGKVSSFEE KMISDAIPEL KASIKKGEDF

VKTLK

Tag: His-tag Predicted MW: 35.2 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 7.5) containing 10% Glycerol

Bioactivity: Biological: Specific activity is > 30 units/mg, and is 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 (see "Protocols").

Preparation: Liquid purified protein **Applications:** Protocol: **Activity Assay**

> 1. Prepare assay buffer into a suitable container and pre-chill on ice before use: The final concentrations are 100 mM Potassium phosphate, 0.13 mM beta-nicotinamide adenine

dinucleotide, reduced form, 0.25 mM oxalacetic acid.

2. Add recombinant MDH protein with various concentrations (0.1ug, 0.5ug, 1ug) in assay

buffer.

3. Mix by inversion and equilibrate to 1°C and monitor at A340nm until the value is constant

using a spectrophotometer.

4. Record the increase at A340nm for approximately 2 minutes.





MDH2 (25-338, His-tag) Human Protein - AR09617PU-L

Protein Description: Recombinant human MDH2 protein, fused to His-tag at N-terminus, was expressed in E.coli

and purified by using conventional chromatography.

Storage: Store undiluted at 2-8°C for up to two weeks or (in aliquots) at -20°C or -70°C for longer.

Avoid repeated freezing and thawing.

Stability: Shelf life: one year from despatch.

RefSeq: NP 001269332

Locus ID: 4191

UniProt ID: <u>P40926</u>, <u>B3KTM1</u>

Cytogenetics: 7q11.23

Synonyms: DEE51; EIEE51; M-MDH; MGC:3559; MOR1

Summary: Malate dehydrogenase catalyzes the reversible oxidation of malate to oxaloacetate, utilizing

the NAD/NADH cofactor system in the citric acid cycle. The protein encoded by this gene is localized to the mitochondria and may play pivotal roles in the malate-aspartate shuttle that operates in the metabolic coordination between cytosol and mitochondria. Several transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Sep

2013]

Protein Families: Druggable Genome

Protein Pathways: Citrate cycle (TCA cycle), Glyoxylate and dicarboxylate metabolism, Metabolic pathways,

Pyruvate metabolism

Product images:

