

Datasheet for ABIN621154

**Malate Dehydrogenase (MDH) Protein**[Go to Product page](#)

## Overview

Quantity:	50000 IU
Target:	Malate Dehydrogenase (MDH)
Origin:	Chicken
Host:	Please inquire
Protein Type:	Recombinant

## Product Details

Characteristics:	Recombinant Malate Dehydrogenase
Purity:	> 95.0 % as determined by: (a) Analysis by RP-HPLC. (b) Analysis by SDS-PAGE. Unit Definition One unit is defined as 1 $\mu$ mol of NAD + production per minute under the assay conditions (25°C, pH 7.5). Specific Activity Specific Activity > 710U/mg protein.

## Target Details

Target:	Malate Dehydrogenase (MDH)
Alternative Name:	Malate Dehydrogenase ( <a href="#">MDH Products</a> )
Background:	<p>The DNA encoding Malate (Malic) Dehydrogenase is cloned from cDNA library of chicken heart. The MDH is purified by proprietary chromatographic techniques. Introduction: Malate dehydrogenase (EC1.1.1.37) is an enzyme in the citric acid cycle that catalyzes the conversion of malate into oxaloacetate (using NAD<sup>+</sup>) and vice versa (this is a reversible reaction). Malate dehydrogenase is not to be confused with malic enzyme, which catalyzes the conversion of pyruvate using NADPH. Malate dehydrogenase is also involved in gluconeogenesis, the synthesis of glucose from smaller molecules. Pyruvate in the mitochondria is acted upon by</p>

## Target Details

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pyruvate carboxylase to form oxaloacetate, a citric acid cycle intermediate. In order to get the oxaloacetate out of the mitochondria, malate dehydrogenase reduces it to malate, and it then traverses the inner mitochondrial membrane. Once in the cytosol, the malate is oxidized back to oxaloacetate by cytosolic malate dehydrogenase. Finally, phosphoenol-pyruvate carboxy kinase (PEPCK) converts oxaloacetate to phosphoenol pyruvate. Synonyms: Malate dehydrogenase cytoplasmic, EC 1.1.1.37, Cytosolic malate dehydrogenase, MDHA, MOR2, MDH-s, MGC:1375.

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Pathways: [Regulation of Lipid Metabolism by PPARalpha](#)

## Application Details

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Restrictions: For Research Use only

## Handling

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Format: Lyophilized

Buffer: Each mg of protein contains 0.59mg NaPO<sub>4</sub>. It is recommended to reconstitute the lyophilized Malate dehydrogenase in sterile 18M omega cm H<sub>2</sub>O.

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Storage: -20 °C