Datasheet for ABIN7318759

MDH1 Protein (His tag)

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Overview

Quantity:	50 µg
Target:	MDH1
Origin:	Human
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Purification tag / Conjugate:	This MDH1 protein is labelled with His tag.

Product Details

Purpose:	Recombinant Human MDH1 Protein (His Tag)
Sequence:	Ser2-Ala334
Characteristics:	Recombinant Human Malate Dehydrogenase, Cytoplasmic is produced by our E.coli expression system and the target gene encoding Ser2-Ala334 is expressed with a 6His tag at the C-terminus.
Purity:	> 95 % as determined by reducing SDS-PAGE.
Endotoxin Level:	< 1.0 EU per µg as determined by the LAL method.

Target Details

Target:	MDH1
Alternative Name:	MDH1 (MDH1 Products)
Background:	Background: Malate Dehydrogenase, Cytoplasmic (MDH1) is an enzyme which belongs to the MDH Type 2 sub-family of LDH/MDH superfamily. MDH1 is involved in the Citric Acid Cycle that

Target Details

	catalyzes the conversion of Malate into Oxaloacetate (using NAD+) and vice versa. MDH1 should not be confused with Malic Enzyme, which catalyzes the conversion of Malate to Pyruvate, producing NADPH. MDH1 also participates in Gluconeogenesis, the synthesis of Glucose from smaller molecules. Pyruvate in the mitochondria is acted upon by Pyruvate Carboxylase to form Pxaloacetate, a Citric Acid Cycle intermediate. In order to transport 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 MDH1. Finally, Phosphoenol-Pyruvate Carboxy Kinase (PEPCK) converts Oxaloacetate to Phosphoenol Pyruvate. Synonym: Malate Dehydrogenase Cytoplasmic, Cytosolic Malate Dehydrogenase, Diiodophenylpyruvate Reductase, MDH1, MDHA
Molecular Weight:	37.5 kDa
UniProt:	P40925

Application Details

Restrictions:	For Research Use only

Handling

Format:	Frozen, Liquid
Buffer:	Supplied as a 0.2 µm filtered solution of 20 mM Tris, 150 mM NaCl, pH 8.0.
Storage:	-20 °C
Storage Comment:	Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.