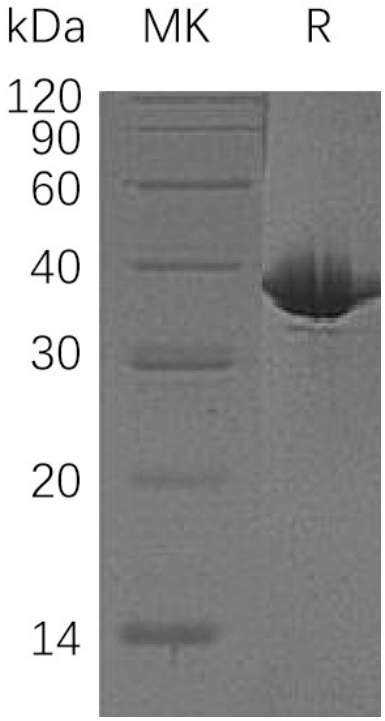
Product Name: Recombinant Human MDH1 (C-6His)
Catalog #: PEH1142

Summary

Name	MDH1/Malate dehydrogenase, cytoplasmic
Purity	Greater than 95% as determined by reducing SDS-PAGE
Endotoxin level	<1 EU/μg as determined by LAL test.
Construction	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.
Accession #	P40925
Host	E.coli
Species	Human
Predicted Molecular Mass	37.5 KDa
Formulation	Supplied as a 0.2 μm filtered solution of 20mM Tris-HCl, 150mM NaCl, pH 8.0.
Shipping	The product is shipped on dry ice/polar packs. Upon receipt, store it immediately at the temperature listed below.
Stability&Storage	Store at ≤-70°C, stable for 6 months after receipt. Store at ≤-70°C, stable for 3 months under sterile conditions after opening. Please minimize freeze-thaw cycles.
Reconstitution	

SDS-PAGE image

Product Name: Recombinant Human MDH1 (C-6His)
Catalog #: PEH1142



Alternative Names

Malate Dehydrogenase Cytoplasmic; Cytosolic Malate Dehydrogenase; Diiodophenylpyruvate Reductase; MDH1; MDHA

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 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.

Note

For Research Use Only , Not for Diagnostic Use.