
Recombinant Rat MDHA / MDH1 Protein (His tag)**Cat.NO.: TP06387**

3th Edition

Synonyms:MDL1;Mdh1;Mor2

Description:Malate dehydrogenases 1(MDH1 / MDHA) is soluble form of malate dehydrogenases. Malate dehydrogenases (MDH) is a group of multimeric enzymes consisting of identical subunits usually organized as either dimer or tetramers with subunit molecular weights of 30-35 kDa. MDH has been isolated from different sources including archaea, eubacteria, fungi, plant and mammals. MDH catalyzes the NAD/NADH-dependent interconversion of the substrates malate and oxaloacetate. This reaction plays a key part in the malate / aspartate shuttle across the mitochondrial membrane, and in the tricarboxylic acid cycle within the mitochondrial matrix. The enzymes share a common catalytic mechanism and their kinetic properties are similar, which demonstrates a high degree of structural similarity. The three-dimensional structures and elements essential for catalysis are conserved between mitochondrial and cytoplasmic forms of MDH in eukaryotic cells even though these isoenzymes are only marginally related at the level of primary structure.

Form:PBS**Molecular Weight:**38 kDa**Sequences:**Met 4-Ala 334**Purity:**> 95% by HPLC**Concentration:****Endotoxin Level:**<1.0 EU per 1 ug of protein (determined by LAL method)**Storage:**Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.