

## 32-7607: Recombinant E. coli Malate Dehydrogenase/MDH (N-6His)(Discontinued)

**Gene :** mdh  
**Gene ID :** 947854  
**Uniprot ID :** P61889

### Description

Source: E.coli.  
MW :34.6kD.

Recombinant E.coli Malate Dehydrogenase is produced by our E.coli expression system and the target gene encoding Met1-Lys312 is expressed with a 6His tag at the N-terminus. Escherichia coli MDH, also known as Malate dehydrogenase, 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. Its major function is to catalyze 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. MDH is synthesized in several organisms including archaea, eubacteria, fungi, plant and mammals. 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.

### Product Info

**Amount :** 10 µg / 50 µg  
**Content :** Supplied as a 0.2 µm filtered solution of 50mM PB,50%Glycerol,pH7.5.  
**Storage condition :** Store at -20°C, stable for 6 months after receipt. Please minimize freeze-thaw cycles.  
**Amino Acid :** MGSSHHHHHHSSGLVPRGSHMKVAVLGAAGGIGQALALLLKTQLPSGSELSLYDIAPVTPGVAVDLSHIPTAVK  
IKGFSGEDATPALEGADVLLISAGVRRKPGMDRSDLFNVNAGIVKNLVQVAKTCPKACIGIITNPVNTTVAIAA  
EVLKKGAVYDKNKLLGVTTLDIIRSNTFVAELKKGQPGVEVEVPVIGGHSGVTILPLLSQVPGVVFTEQEVADLTKR  
IQNAGTEVVEAKAGGGSATLSMGQAAARFGLSLVRALQGEQGVVECAVVEGDGQYARFFSQPLLLGKNGVEE  
RKSIGTLSAFEQNALEGMLDTLKKDIALGQEFVNK

### Application Note

**Endotoxin :** Less than 0.1 ng/µg (1 IEU/µg) as determined by LAL test.