

Malate Dehydrogenase 1 Active Protein | MDH1 active protein

Recombinant Human Malate Dehydrogenase 1

CATALOG #
AAA38835

HOST
E Coli

PRODUCT SYNONYMS

Malate Dehydrogenase 1; Recombinant Human Malate Dehydrogenase 1; MDH1 Human; Malate Dehydrogenase 1 Human Recombinant; MDH-s; MDHA; MOR2; MDH1 active protein

PRODUCT SPECIFICATIONS

Host	E Coli
Purity/Purification	Greater than 95.0% as determined by SDS-PAGE.
Form/Format	The MDH1 1mg/ml protein solution contains 20mM Tris-HCl pH-8, and 10% glycerol. Sterile Filtered colorless solution.
Sequence	MSEPIRVLT GAAGQIAYSL LYSIGNSVF GKDQPIILVL LDITPMMGV L DGVLME LQDC ALPLLKDVIA TDKEDVAFKD LDVAILV GSM PRREGMERKD LLKANVKIFK SQGAALDKYA KKS VKVIVVG NPANTNCLTA SKSAPSIPKE NFSC LTRLDH NRAKAQIALK LGVTANDVKN VIIWGNHSST QYPDVNHAKV KLQGKEVGVY EALKDDSWLK GEFVTTVQQR GAAVIKARKL SSAMSAAKAI CDHVRDIWFG TPEGEFVSMG VISDGNSYGV PDDL LYSFPV VIKNKTWK FV EGLPINDFSR EKMDLTAKEL TEEKESAFEF LSSALEH HHHHH.
Sequence Length	352
Biological Activity	Specific activity is > 8 units/mg, and is defined as the amount of enzyme that cleaves 1umole of oxalacetate and beta-NADH to L-malate and beta-NAD per minute at pH7.5 at 25 degree C.
Preparation and Storage	MDH1 although stable 4 degree C for 4 weeks, should be stored desiccated below -18 degree C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

ADDITIONAL INFORMATION

Related Product Information for MDH1 active protein	Description: MDH1 Human Recombinant produced in E Coli is a single, non-glycosylated polypeptide chain containing 342 amino acids (1-334 a.a.) and having a molecular mass of 37.4 kDa. The MDH1 is fused to an 8 amino acid His tag at C-terminus and purified by conventional chromatography. Introduction: MDH1 catalyzes the reversible oxidation of malate to oxaloacetate, using the NAD/NADH cofactor system in the citric acid cycle. MDH1 is abundantly found in the cytoplasm and is involved in the malate-aspartate shuttle that functions in the metabolic coordination between cytosol and mitochondria. MDH1 regulates p53-dependent cell-cycle arrest and apoptosis in response to glucose deprivation.
Product Categories/Family for MDH1 active protein	Enzymes; Dehydrogenase

NCBI AND UNIPROT INFORMATION

NCBI GI #	312283701
NCBI GeneID	4190
NCBI Accession #	NP_001186040.1
NCBI GenBank Nucleotide #	NM_001199111.1
UniProt Accession #	P40925; Q6I9V0; B2R5V5; B4DUN2; B7Z3I7; F5H098

Molecular Weight	38,628 Da
NCBI Official Full Name	malate dehydrogenase, cytoplasmic isoform 1
NCBI Official Synonym Full Names	malate dehydrogenase 1, NAD (soluble)
NCBI Official Symbol	MDH1
NCBI Official Synonym Symbols	MDHA; MOR2; MDH-s; HEL-S-32; MGC:1375
NCBI Protein Information	malate dehydrogenase, cytoplasmic; cytosolic malate dehydrogenase; diiodophenylpyruvate reductase; epididymis secretory protein Li 32; soluble malate dehydrogenase
UniProt Protein Name	Malate dehydrogenase, cytoplasmic
UniProt Gene Name	MDH1
UniProt Synonym Gene Names	MDHA
UniProt Entry Name	MDHC_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/e-coli-mdh1-active-protein/malate-dehydrogenase-1/38835>