

Rabbit anti-Rat MDH1 Polyclonal Antibody | anti-MDH1 antibody

Anti-MDH1 Antibody, Rabbit Polyclonal

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA257308	Rabbit	Rat	Immunoprecipitation, ELISA, Western Blot

PRODUCT SYNONYMS

MDH1; Polyclonal Antibody; Anti-MDH1 Antibody; Rabbit Polyclonal; MDHA/MDH1 Antibody; Rabbit PAb; Antigen Affinity Purified; malate dehydrogenase 1; NAD (soluble); anti-MDH1 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Rat
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Rat MDHA/MDH1
Purity/Purification	Protein A & Antigen Affinity
Form/Format	Liquid; 0.2um filtered solution in PBS
Applicable Applications for anti-MDH1 antibody	IP (Immunoprecipitation), ELISA, WB (Western Blot)
Immunogen	Recombinant Rat MDHA/MDH1 protein
Conjugation	Unconjugated
Preparation	Produced in rabbits immunized with purified, recombinant Rat MDHA/MDH1 (rR MDHA/MDH1). MDHA/MDH1 specific IgG was purified by Rat MDHA/MDH1 affinity chromatography.
Preparation and Storage	This antibody can be stored at 2-8 degree C for one month without detectable loss of activity. Antibody products are stable for twelve months from date of receipt when stored at -20 degree C to -80 degree C. Preservative-Free. Avoid repeated freeze-thaw cycles.

IMAGES



WB (Western Blot)

Anti-MDH1 rabbit polyclonal antibody at 1:500 dilution Lane A: HepG2 Whole Cell Lysate Lysates/proteins at 30 ug per lane. Secondary Goat Anti-Rabbit IgG H&L (Dylight 800) at 1/10000 dilution. Developed using the Odyssey technique. Performed under reducing conditions. Predicted band size: 36 kDa Observed band size: 36 kDa (We are unsure as to the identity of these extra bands).



IP (Immunoprecipitation)

rat MDH1 was immunoprecipitated using: Lane A: 0.5 mg Hela Whole Cell Lysate 2 uL anti-rat MDH1 rabbit polyclonal antibody and 15 ul of 50 % Protein G agarose. Primary antibody: Anti-rat MDH1 rabbit polyclonal antibody, at 1:200 dilution Secondary antibody: Dylight 800-labeled antibody to rabbit IgG (H+L), at 1:5000 dilution Developed using the Odyssey technique. Performed under reducing conditions. Predicted band size: 36 kDa Observed band size: 36 kDa

ADDITIONAL INFORMATION

Related Product Information for anti-MDH1 antibody	Malate dehydrogenases 1(MDH1/MDHA) is a 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, plants, 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 the primary structure.
References	Minarik P, et al. (2002) Malate dehydrogenases--structure and function. Gen Physiol Biophys. 21 (3): 257-65.Musrati RA, et al. (1998) Malate dehydrogenase: distribution, function and properties. Gen Physiol Biophys. 17 (3): 193-210.Hall MD, et al. (1992) Crystal structure of Escherichia coli malate dehydrogenase. A complex of the apoenzyme and citrate at 1.87 A resolution. J Mol Biol. 226 (3): 867-82.

NCBI AND UNIPROT INFORMATION

NCBI GI #	15100179
NCBI GeneID	24551
NCBI Accession #	NP_150238.1
NCBI GenBank Nucleotide #	NM_033235.2
UniProt Accession #	O88989; O88585; Q6PCV2
Molecular Weight	36,483 Da
NCBI Official Full Name	malate dehydrogenase, cytoplasmic isoform Mdh1
NCBI Official Synonym Full Names	malate dehydrogenase 1
NCBI Official Symbol	Mdh1
NCBI Official Synonym Symbols	MDL1; Mdhl; Mor2
NCBI Protein Information	malate dehydrogenase, cytoplasmic; malate dehydrogenase, peroxisomal
UniProt Protein Name	Malate dehydrogenase, cytoplasmic
UniProt Gene Name	Mdh1
UniProt Synonym Gene Names	Mdh

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.