10320 Camino Santa Fe, Suite G
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KD-Validated Anti-Malate Dehydrogenase 1 Rabbit Monoclonal Antibody

Rabbit monoclonal antibody
Catalog # AGI1671

Specification

KD-Validated Anti-Malate Dehydrogenase 1 Rabbit Monoclonal Antibody - Product Information

Application	**WB, FC**
Primary Accession	P40925
Reactivity	**Rat, Human, Mouse**
Clonality	**Monoclonal**
Isotype	**Rabbit IgG**
Calculated MW	**Predicted, 36 kDa , observed , 36 kDa KDa**
Gene Name	**MDH1**
Aliases	**MDH1; Malate Dehydrogenase 1; Malate Dehydrogenase 1, NAD (Soluble); Aromatic Alpha-Keto Acid Reductase; Malate Dehydrogenase, Cytoplasmic; Cytosolic Malate Dehydrogenase; EC 1.1.1.37; MDHA; KAR; Epididymis Secretory Protein Li 32; Malate Dehydrogenase, Peroxisomal; Diiodophenylpyruvate Reductase; Soluble Malate Dehydrogenase; EC 1.1.1.96; HEL-S-32; MGC:1375; EIEE88; DEE88; MDH-S; MOR2**
Immunogen	**A synthesized peptide derived from human MDH1**

KD-Validated Anti-Malate Dehydrogenase 1 Rabbit Monoclonal Antibody - Additional Information

Gene ID	**4190**

Other Names
Malate dehydrogenase, cytoplasmic, 1.1.1.37, Aromatic alpha-keto acid reductase, KAR, 1.1.1.96, Cytosolic malate dehydrogenase, MDH1 {ECO:0000303|PubMed:34012073, ECO:0000312|HGNC:HGNC:6970}

KD-Validated Anti-Malate Dehydrogenase 1 Rabbit Monoclonal Antibody - Protein Information

Name MDH1 {ECO:0000303|PubMed:34012073, ECO:0000312|HGNC:HGNC:6970}

Function
Catalyzes the reduction of aromatic alpha-keto acids in the presence of NADH (PubMed:2449162, PubMed:3052244). Plays essential roles in the malate-aspartate shuttle and the tricarboxylic acid cycle, important in mitochondrial NADH supply for oxidative phosphorylation (PubMed:<a

href="http://www.uniprot.org/citations/31538237" target="_blank">31538237). Catalyzes the reduction of 2-oxoglutarate to 2- hydroxyglutarate, leading to elevated reactive oxygen species (ROS) (PubMed:34012073).

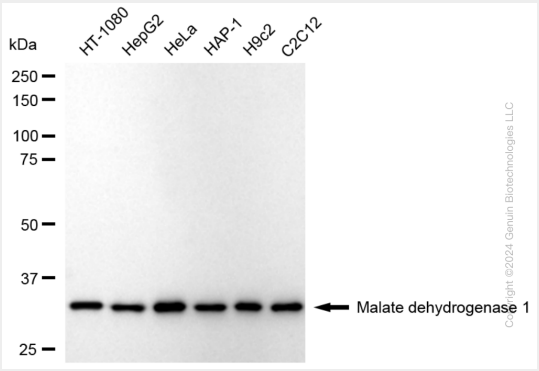
Cellular Location
Cytoplasm, cytosol.

KD-Validated Anti-Malate Dehydrogenase 1 Rabbit Monoclonal Antibody - Protocols

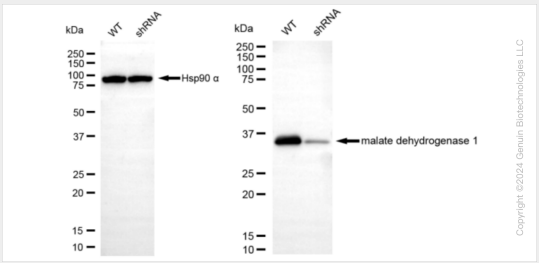
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

KD-Validated Anti-Malate Dehydrogenase 1 Rabbit Monoclonal Antibody - Images



Western blotting analysis using anti-Malate dehydrogenase 1 antibody (Cat#AGI1671). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-Malate dehydrogenase 1 antibody (Cat#AGI1671, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Western blotting analysis using anti-malate dehydrogenase 1 antibody (Cat#AGI1671). Malate dehydrogenase 1 expression in wild-type (WT) and malate dehydrogenase 1 (MDH1) shRNA knockdown (KD) HeLa cells with 20 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with anti-malate dehydrogenase 1 antibody (Cat#AGI1671, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.

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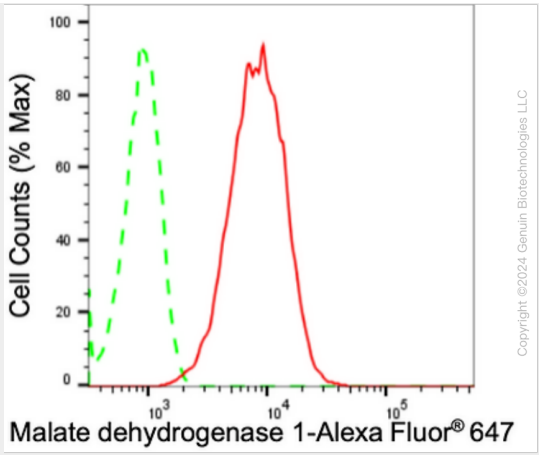

Flow cytometric analysis of Malate dehydrogenase 1 expression in HepG2 cells using anti-Malate dehydrogenase 1 antibody (Cat#AGI1671, 1:2,000). Green, isotype control; red, Malate dehydrogenase 1.