

Recombinant mouse Malate dehydrogenase 2/MDH2 protein

Catalog Number: ATGP3722

PRODUCT INFORMATION

Expression system

E.coli

Domain

25-338aa

UniProt No.

P08249

NCBI Accession No.

NP_032643

Alternative Names

Malate dehydrogenase, mitochondrial, MDH, Mdh-2, Mor-1, Mor1

PRODUCT SPECIFICATION

Molecular Weight

35.4 kDa (335aa) confirmed by MALDI-TOF

Concentration

1mg/ml (determined by absorbance at 280nm)

Formulation

Liquid in. Phosphate-Buffered Saline (pH 7.4) containing 20% glycerol

Purity

> 95% by SDS-PAGE

Endotoxin level

Biological Activity

Specific activity is > 800unit/mg, and is defined as the amount of enzyme that cleaves 1umole of oxaloacetate and beta-NADH to L-malate and beta-NAD per minute at pH8.0 at 37C

Tag

His-Tag

Application

SDS-PAGE, Enzyme Activity

Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

Description

Mdh2, also known as Malate dehydrogenase 2. Mdh2 catalyzes the reversible oxidation of malate to

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oxaloacetate, utilizing the NAD/NADH cofactor system in the citric acid cycle. In particular, Mdh2 is localized to the mitochondria and may play pivotal roles in the malate-aspartate shuttle that operates in the metabolic coordination between cytosol and mitochondria. It is widely expressed with high expression levels found in adrenal, small intestine, heart and pancreas. Recombinant mouse Mdh2 protein, fused to His-tag at N-terminus, was expressed in *E. coli* and purified by using conventional chromatography techniques.

Amino acid Sequence

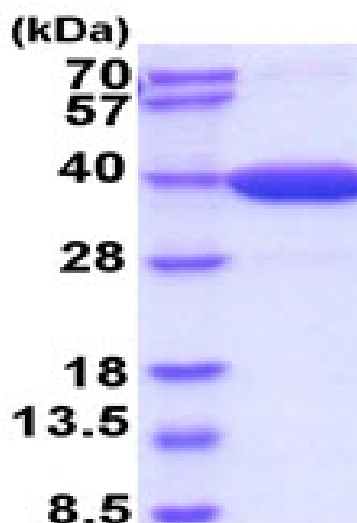
MGSSHHHHHH SSGLVPRGSH MAKVAVLGAS GGIGQPLSLL LKNSPLVSRL TLYDIAHTPG VAADLSHIET RANVKGYLGP
EQLPDCLKGC DVVVIPAGVP RKPGMTRDDL FNTNATIVAT LTAACAQHCP EAMVCIIANP VNSTIPITAE VFKKHGVYNP
NKIFGVTTLD IVRANTFVAE LKGLDPAVRN VPVIGGHAGK TIIP LISQCT PKVDFPQDQL ATLTGRIQEA GTEVVKAKAG
AGSATLSMAY AGARFVFSLV DAMNGKEGVV ECSFVQSKET ECTYFSTPLL LGKKGLEKNL GIGKITPFEE KMIAEAIPEL
KASIKKGEDF VKNMK

General References

Wang L., et al. (2010) *Dev Dyn.* 239(3):954-64
Chang AK., et al. (2002) *J Basic Microbiol.* 42(4):238-45.

DATA

SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.

15% SDS-PAGE (3ug)