

# MDH2 (Human) Recombinant Protein (Q01)

Catalog # H00004191-Q01 Size 25 ug, 10 ug

## **Applications**



Specification	
Product Description	Human MDH2 partial ORF ( NP_005909, 134 a.a 246 a.a.) recombinant protein with GST-tag at N -terminal.
Sequence	EAMICVIANPVNSTIPITAEVFKKHGVYNPNKIFGVTTLDIVRANTFVAELKGLDPARVNVPVIGGHA GKTIIPLISQCTPKVDFPQDQLTALTGRIQEAGTEVVKAKAGAGS
Host	Wheat Germ (in vitro)
Theoretical MW (kDa)	38.17
Interspecies Antigen Sequence	Mouse (96); Rat (96)
Preparation Method	in vitro wheat germ expression system
Purification	Glutathione Sepharose 4 Fast Flow
Quality Control Testing	12.5% SDS-PAGE Stained with Coomassie Blue.
Storage Buffer	50 mM Tris-HCl, 10 mM reduced Glutathione, pH=8.0 in the elution buffer.
Storage Instruction	Store at -80°C. Aliquot to avoid repeated freezing and thawing.
Note	Best use within three months from the date of receipt of this protein.



# Applications

- Enzyme-linked Immunoabsorbent Assay
- Western Blot (Recombinant protein)
- Antibody Production
- Protein Array

Gene Info — MDH2	
Entrez GeneID	4191
GeneBank Accession#	NM_005918
Protein Accession#	NP_005909
Gene Name	MDH2
Gene Alias	M-MDH, MDH, MGC:3559, MOR1
Gene Description	malate dehydrogenase 2, NAD (mitochondrial)
Omim ID	<u>154100</u>
Gene Ontology	<u>Hyperlink</u>
Gene Summary	Malate dehydrogenase catalyzes the reversible oxidation of malate to oxaloacetate, utilizing the N AD/NADH cofactor system in the citric acid cycle. The protein encoded by this gene is localized t o the mitochondria and may play pivotal roles in the malate-aspartate shuttle that operates in the metabolic coordination between cytosol and mitochondria. [provided by RefSeq
Other Designations	mitochondrial malate dehydrogenase

### Pathway

- Biosynthesis of alkaloids derived from histidine and purine
- Biosynthesis of alkaloids derived from ornithine
- Biosynthesis of alkaloids derived from shikimate pathway
- Biosynthesis of alkaloids derived from terpenoid and polyketide



- Biosynthesis of phenylpropanoids
- Biosynthesis of plant hormones
- Biosynthesis of terpenoids and steroids
- Carbon fixation in photosynthetic organisms
- Citrate cycle (TCA cycle)
- Glyoxylate and dicarboxylate metabolism
- Metabolic pathways
- Pyruvate metabolism
- Reductive carboxylate cycle (CO2 fixation)

#### Disease

• Tobacco Use Disorder