

Product datasheet for **TP720248**

MDH1 (NM_001199111) Human Recombinant Protein

Product data:

Product Type:	Recombinant Proteins
Description:	Recombinant protein of human malate dehydrogenase 1, NAD (soluble) (MDH1), transcript variant 1.
Species:	Human
Expression Host:	E. coli
Expression cDNA Clone or AA Sequence:	Ser2-Ala334
Tag:	C-His
Predicted MW:	37.5 kDa
Concentration:	lot specific
Purity:	>95% as determined by SDS-PAGE and Coomassie blue staining
Buffer:	Supplied as a 0.2 um filtered solution of 20mM Tris-HCl, 150mM NaCl, pH 8.0.
Endotoxin:	< 0.1 EU per µg protein as determined by LAL test
Storage:	Store at < -20°C, stable for 6 months after receipt. Please minimize freeze-thaw cycles.
Stability:	Stable for at least 3 months from date of receipt under proper storage and handling conditions.
RefSeq:	NP_001186040
Locus ID:	4190
UniProt ID:	P40925
Cytogenetics:	2p15
Synonyms:	DEE88; EIEE88; HEL-S-32; KAR; MDH-s; MDHA; MGC:1375; MOR2



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Summary:

This gene encodes an enzyme that catalyzes the NAD/NADH-dependent, reversible oxidation of malate to oxaloacetate in many metabolic pathways, including the citric acid cycle. Two main isozymes are known to exist in eukaryotic cells: one is found in the mitochondrial matrix and the other in the cytoplasm. This gene encodes the cytosolic isozyme, which plays a key role in the malate-aspartate shuttle that allows malate to pass through the mitochondrial membrane to be transformed into oxaloacetate for further cellular processes. Alternatively spliced transcript variants have been found for this gene. A recent study showed that a C-terminally extended isoform is produced by use of an alternative in-frame translation termination codon via a stop codon readthrough mechanism, and that this isoform is localized in the peroxisomes. Pseudogenes have been identified on chromosomes X and 6. [provided by RefSeq, Feb 2016]

Protein Families:

Druggable Genome

Protein Pathways:

Citrate cycle (TCA cycle), Glyoxylate and dicarboxylate metabolism, Metabolic pathways, Pyruvate metabolism

Product images: