

# MALATE DEHYDROGENASE

<b>EC Number</b>	1.1.1.37
<b>Systematic Name</b>	(S)-Malate: NAD <sup>+</sup> oxidoreductase
<b>Alternative Names</b>	Malic hydrolase
<b>Assay Principle</b>	Oxaloacetate + NADH + H <sup>+</sup> $\xrightarrow{\text{MDH}}$ (S)-Malate + NAD <sup>+</sup>
<b>Unit Definition</b>	That amount of enzyme causing the oxidation of one micromole of NADH per minute at 25°C and pH 7.4

## How can Malate Dehydrogenase be used?

In Clinical Chemistry Malate Dehydrogenase has the following applications:

- + Determination of CO<sub>2</sub>/bicarbonate in biological fluids in conjunction with Pep-Carboxylase
- + Indicator enzyme for the determination of serum GOT (Glutamic Oxaloacetic Transaminase)/AST (Aspartate transaminase) which is an indicator of liver function
- + To determine metabolites e.g. Oxaloacetate and Malate



## Key Benefits

### + SECURITY OF SUPPLY

Secure and well-established supply chain

### + BULK CAPABILITIES

Manufactured in bulk quantities for over 40 years

### + CHOICE AND FLEXIBILITY

Available in a variety of preparations to suit your application

Order your evaluation sample today

<b>Storage</b>	MDHP3	Store between +2°C and +8°C. <b>Do not freeze.</b>
	MDHP3F	Store desiccated at -15°C or below.
	MDHP3G	Store between +2°C and +8°C. <b>Do not freeze.</b>
<b>Stability</b>	Stable for 6 months when stored in accordance with storage conditions.	

## Product Analysis

An example of typical batch data

Code	MDHP3	MDHP3F	MDHP3G
<b>Batch</b>	265R	265RF	268G
<b>Activity</b>	23,800 U/ml	132 U/mg	23,200U/ml
	1,653 U/mg protein	1526 U/mg protein	1830 U/mg protein
<b>Protein Concentration</b>	14.4 mg protein/ml	0.0865 mg enzyme protein/mg material	12.7 mg protein/ml
<b>Contaminants</b>	CK: <0.0001%	CK: <0.0001%	CK: <0.0001%
	Fumerase: <0.0001%	Fumerase: <0.0001%	Fumerase: <0.001%
	GLDH: 0.00085%	GLDH: 0.00085%	GLDH: 0.00112%
	GPT (P5P activated): 0.0012%	GPT (P5P activated): 0.0012%	GPT (P5P activated): 0.00139%
	GOT (P5P activated): 0.0018%	GOT (P5P activated): 0.0018%	GOT (P5P activated): 0.00247%
	LDH: <0.0001%	LDH: <0.0001%	LDH: <0.001%

## ORDERING DETAILS - USE THE FOLLOWING CODES WHEN ORDERING

Product	Code	Description	Form
Malate Dehydrogenase	MDHP3	>1500 U/mg protein	A suspension in 80% saturated ammonium sulphate solution
	MDHP3F	>1500 U/mg protein	A white freeze-dried powder
	MDHP3G	>1500 U/mg protein	A suspension in 50% glycerol

## Related Products

Name	Code	Activity
Lactate Dehydrogenase	LDHP2	>300 U/mg protein
	LDHP2FS	>250 U/mg protein

Order a sample today [sales@bbisolutions.com](mailto:sales@bbisolutions.com)

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