

Malate Dehydrogenase Assay Kit

Product Information

Cat

Kit-2461

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Product Overview

Malate dehydrogenase (MDH) (EC 1.1.1.37) is an enzyme which reversibly catalyzes the oxidation of L-malate to oxaloacetate in the presence of NAD. There are 2 isoforms in eukaryotic cells: MDH1 and MDH2. MDH1 found in the cytoplasm and plays a key part in the malate-aspartate shuttle for transporting malate into the mitochondria. MDH2 is a mitochondrial enzyme which participates in the TCA cycle that reversibly converts L-malate into oxaloacetate. Higher MDH activities are found in some neurodegenerative diseases such as Alzheimer's disease. The non-radioactive, colorimetric MDH assay is based on the reduction of the tetrazolium salt MTT in a NADH-coupled enzymatic reaction to a reduced form of MTT which exhibits an absorption maximum at 565 nm. The increase in absorbance at 565 nm is proportional to the enzyme activity.

Storage

-20°C

Shipping

On Ice

Size

100 tests

Detection method OD565nm

Compatible Sample Types

Biological samples (e.g. plasma, serum, erythrocytes, tissue and culture media).

Features & Benefits

Malate Dehydrogenase Assay Kit

Fast and sensitive. Linear detection range (20 μ L sample): 0.5 to 65 U/L for 20 min reaction at 37°C. Convenient and high-throughput. Homogeneous "mix-incubate-measure" type assay. Can be readily automated on HTS liquid handling systems for processing thousands of samples per day.

Assay time

30 min

Sensitivity

0.5 U/L
