QuantiChrom™ Lactate Dehydrogenase Kit

LACTATE DEHYDROGENASE (LDH) is an oxidoreductase which catalyzes the interconversion of lactate and pyruvate. When disease or injury affects tissues containing LDH, the cells release LDH into the bloodstream, where it is identified in higher than normal levels. Therefore, LDH is most often measured to evaluate the presence of tissue or cell damage. The non-radioactive colorimetric LDH 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 intensity of the purple color formed is directly proportional to the enzyme activity.

KEY FEATURES

High sensitivity and wide linear range. Use 3 µL serum or plasma sample. The detection limit is 2 IU/L, linear up to 200 IU/L.

Homogeneous and simple procedure. Simple "mix-and-measure" procedure allows reliable quantitation of LDH activity within 30 minutes.

Robust and amenable to HTS. All reagents are compatible with high-throughput liquid handling instruments.

APPLICATIONS:

Direct Assays: LDH activity in serum, plasma and other sources.

Characterization and Quality Control for LDH production.

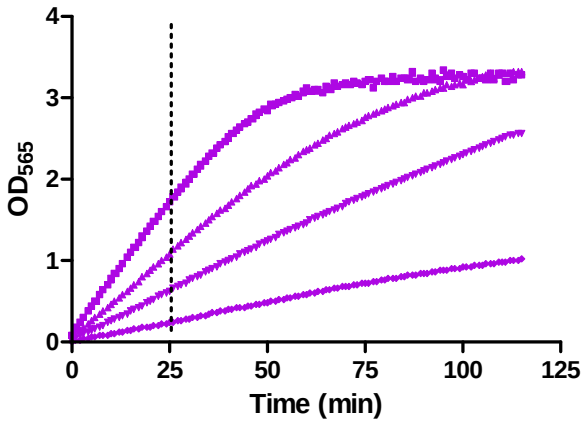
Drug Discovery: screen and evaluation of LDH modulators.

PRODUCT INFORMATION:

Lactate Dehydrogenase Kit	**DLDH-100**

Each kit is sufficient for 100 assays in 96-well plate. Kit includes:

- 1 x 20 mL Substrate Buffer
- 1 x 1 mL NAD Solution
- 1 x 1 mL PMS Solution
- 1 x 2 mL MTT Solution
- 1 x 10 mL Calibrator



Kinetics of LDH reaction in 96-well plate assay

REFERENCES:

[1]. Babson, AL and Babson, SR. (1973) Kinetic Colorimetric Measurement of Serum Lactate Dehydrogenase Activity. Clin Chem. 19(7):766-9.

[2]. Karlsen RL, Norgaard L, Guldbrandsen EB (1981). A rapid method for the determination of urea stable lactate dehydrogenase on the 'Cobas Bio' centrifugal analyser.Scand J Clin Lab Invest. 41(5):513-6.

[3]. Coley HM, Lewandowicz G, Sargent JM, Verrill MW (1997). Chemosensitivity testing of fresh and continuous tumor cell cultures using lactate dehydrogenase.Anticancer Res. 17(1A):231-6.