

Pyruvate Assay Kit

Product Information

Cat

Kit-2514

Cat.No.

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Product Overview

Pyruvate is a key intermediate in cellular metabolic pathways. Pyruvate can be converted to carbohydrates via gluconeogenesis, to fatty acids or energy through acetyl-CoA, to the amino acid alanine and to ethanol. Abnormal levels of pyruvate have been linked to liver diseases and metabolic disorders. Simple, direct and automation-ready procedures for measuring pyruvate concentrations find wide applications in research and drug discovery. pyruvate assay uses a single Working Reagent that combines pyruvate oxidase and hydrogen peroxide determination in one step. The color intensity of the reaction product at 570nm or fluorescence intensity at $\lambda_{ex}/\lambda_{em} = 530/585\text{nm}$ is directly proportional to pyruvate concentration in the sample.

Storage

-20°C

Shipping

On Ice

Size

100 tests

Detection method OD570nm, or FL530/585nm

Compatible Sample Types

Biological

Features & Benefits

Sensitive and accurate. Use as little as 10 μL samples. Linear detection range in 96-well plate: 2 to

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500 μ M (17 μ g/dL to 4.4 mg/dL) pyruvate for colorimetric assays and 0.2 to 50 μ M for fluorimetric assays.

Simple and convenient. The procedure involves addition of a single working reagent and incubation for 30 min at room temperature, compatible for HTS assays.

Improved reagent stability. The optimized formulation has greatly enhanced the reagent and signal stability.

Assay time

20 min

Sensitivity

OD, FL: 2, 0.2 μ M
