

Xanthine Assay Kit

Product Information

Cat

Kit-2476

Cat.No.

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Product Overview

Xanthine is a purine base that can be found in most animal tissues and fluids. It is a product in the purine degradation pathway, produced by guanine deaminase from guanine, and by xanthine oxidoreductase from hypoxanthine. Xanthine is degraded to uric acid by xanthine oxidase. Clinically, xanthine and its derivatives act on sleep-inducing adenosine receptors as antagonists. Simple, direct and high-throughput assays for measuring xanthine find wide applications in research and drug discovery. xanthine assay kit uses a single Working Reagent that combines the xanthine oxidase reaction and color reaction in one step. The change in color intensity of the reaction product at 570 nm or fluorescence intensity at $\lambda_{ex/em} = 530/585$ nm is directly proportional to xanthine concentration in the sample.

Storage

-20°C

Shipping

On Ice

Size

100 tests

Detection method OD570nm, FL530/585nm

Compatible Sample Types

Cell lysate, serum, and other biological samples.

Features & Benefits

Xanthine Assay Kit

Sensitive and accurate. Use as little as 10 μ L samples. Linear detection range in 96-well plate for 30 minute incubation: 0.01 to 2.5 mM xanthine for colorimetric assays and 3 to 250 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.

Fast and high-throughput. Assays using 96-well plates and liquid handling system could allow simultaneous processing tens of thousands of samples per day.

Assay time

30 min

Sensitivity

FL 3 μ M; OD 10 μ M
