



Xanthine/Hypoxanthine Assay Kit

Product Information

Cat.No.

Kit-0844

Product Overview

The kit can detect Xanthine/Hypoxanthine levels as low as 0.4 μM in various biological samples. (100 assays) Simple procedure; takes ~ 40 minutes. Rapid, sensitive and high-throughput adaptable. Kit contains all necessary reagents for accurate measurement of Xanthine/Hypoxanthine levels.

Size

100 assays

Description

Xanthine, a catabolic product of purine metabolism, is present in body fluids, muscle tissue and certain plants. Structurally like caffeine, Xanthine has a stimulant effect and is used clinically to treat the congestive diseases such as asthma and chronic obstructive pulmonary disease. Xanthine is metabolized into uric acid and superoxide by Xanthine oxidase. Xanthine oxidase deficiency causes the rare genetic disorder Xanthinuria, and leads to Xanthine accumulation in urine and blood, which ultimately progresses to renal failure. Recent studies show that Xanthine levels are elevated following ischemic injury, thus Xanthine can serve as a useful marker for tissue hypoxia. Early detection of Xanthine alteration in biological fluids is crucial for metabolic studies and for diagnostic and therapeutic monitoring. In Xanthine/Hypoxanthine Assay kit, Xanthine/Hypoxanthine is specifically oxidized by the Xanthine Enzyme Mix to form an intermediate, which reacts with Developer & Probe to form a product that can be measured colorimetrically ($\lambda = 570 \text{ nm}$) or fluorometrically (Ex/Em = 535/587 nm). Our Xanthine/Hypoxanthine Assay kit is rapid, simple and sensitive. This high-throughput suitable assay kit can detect Xanthine levels as low as 0.4 μM in various biological samples.

Usage

This product is furnished for LABORATORY RESEARCH USE ONLY. Not for diagnostic or therapeutic use.



CREATIVE **BIOMART**[®]
Assay Kit

Xanthine/Hypoxanthine Assay Kit

Kit Components

Xanthine Assay Buffer
OxiRed™ Probe (in DMSO)
Xanthine Enzyme Mix (Lyophilized)
Developer (Lyophilized)
Xanthine Standard (Lyophilized)

Detection method Colorimetric
Fluorescence Plate Reader

Compatible Sample Types

Animal Tissue
Cell Culture Supernatants
Plasma
Serum
Urine

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