

Glyoxalase I Assay Kit

Product Information

Cat.No.

Kit-0371

Product Overview

Glyoxalase I Assay Kit is a quantitative colorimetric determination of glyoxalase I at 240 nm.

Description

GLYOXALASE I (GLO-1), a lactoylglutathione lyase also known as methylglyoxalase, aldoketomutase, ketone-aldehyde mutase, and (R)-S- lactoylglutathione methylglyoxal-lyase, is an enzyme that catalyzes the isomerization of hemithioacetal adducts which are formed in spontaneous reactions between glutathionyl groups and aldehydes. The primary physiological function of glyoxalase I is the detoxification of methylglyoxal, a reactive 2-oxoaldehyde that is cytostatic at low concentrations and cytotoxic at millimolar concentrations. Glyoxalase I is a target for the development of pharmaceuticals against bacteria, protozoans and human cancer. Simple, direct and automation-ready procedures for measuring GLO-1 activity in biological samples are highly desirable in research and drug discovery. Glyoxalase I Assay Kit provides a sensitive and convenient method for GLO-1 activity determination. The method involves monitoring the increase in the product of the GLO-1 reaction, S- lactoylglutathione, by measuring the change in absorbance at 240 nm.

Applications

Direct Assays: GLO-1 activity in enzyme preparations or biological samples. Drug Discovery/Pharmacology: effects of drugs on GLO-1 activity.

Usage

For research use only (RUO)

Storage

Store the plate at room temperature and other components at -20°C. Shelf life: 12 months after receipt.



Glyoxalase I Assay Kit

Kit Components

Assay Buffer (pH 6.6) 20 mL 96 well UV Titer Plate 1 Plate Substrate 1 mL Co-substrate 1 mL

Detection method Colorimetric

Compatible Sample Types

Biological Sample

Features & Benefits

Sensitive and accurate. Detection limit 4 U/L GLO-1 activity. Simple and high-throughput. The procedure involves incubation of the provided substrate with the sample in a microplate. Can be readily automated as a high-throughput assay for thousands of samples per day