

Glutathione Reductase Assay Kit

Product Information

Cat.No.

Kit-0391

Product Overview

Glutathione Reductase Assay Kit is used for measuring GR activity.

Description

Glutathione Reductase (GR, EC 1.8.1.7) catalyzes the NADPH-dependent reduction of oxidized glutathione (GSSG) to reduced glutathione (GSH), which plays an important role in the GSH redox cycle that maintains adequate levels of reduced GSH. A high GSH/GSSG ratio is essential for protection against oxidative stress. The Glutathione Reductase Assay Kit is a highly sensitive, simple, direct and HTS-ready colorimetric assay for measuring GR activity in biological samples. In the assay, GR reduces GSSG to GSH, which reacts with 5, 5'-Dithiobis (2-nitrobenzoic acid) (DTNB) to generate TNB²⁻ (yellow color, $\lambda_{max} = 405 \text{ nm}$). The assay can detect 0.1-40 mU/ml GR in various samples.

Target Species

Mammals

Usage

For research use only (RUO)

Storage

Store kit at -20°C , protect from light. Warm Assay Buffer to room temperature before use. Briefly centrifuge vials before opening. Read the entire protocol before performing the assay.

Kit Components

GR Assay Buffer 100 ml 3% H₂O₂ 1 ml Catalase (lyophilized) 1 vial TNB Standard (lyophilized) 1 vial DTNB (lyophilized) 1 vial NADPH-GNERAT (lyophilized) 2 vials GSSG (lyophilized) 1 vial GR Positive Control (10 mU; lyophilized) 1 vial

Detection method Colorimetric

Compatible Sample Types



CREATIVE **BIOMART**[®]
Assay Kit

Glutathione Reductase Assay Kit

Biological Fluid, Cell Culture Supernatant, Erythrocyte Lysate, Plasma, Serum, Tissue Culture Supernatant, Urine

Tel: 1-631-559-9269 1-516-512-3133

Fax: 1-631-938-8127

Email: info@creative-biomart.org

45-1 Ramsey Road, Shirley, NY 11967, USA