



## Glutathione Peroxidase Assay Kit II

### Product Information

#### Cat.No.

Kit-0389

#### Product Overview

Glutathione Peroxidase Assay Kit is used for measuring glutathione peroxidase (GPx) activity.

#### Description

Glutathione Peroxidase (GPx, EC 1.11.1.9) family of enzymes play important roles in the protection of organisms from oxidative damage. GPx converts reduced glutathione (GSH) to oxidized glutathione (GSSG), to reduce lipid hydroperoxides to their corresponding alcohols or free hydrogen peroxide to water. Several isozymes have been found in different cellular locations and with different substrate specificity. Low levels of GPx have been correlated with free radical related disorders. In Glutathione Peroxidase Assay Kit, GPx reduces Cumene Hydroperoxide while oxidizing GSH to GSSG. The generated GSSG is reduced to GSH with consumption of NADPH by GR. The decrease of NADPH (easily measured at 340 nm) is proportionally to GPx activity. The assay can be used to measure all of the glutathione dependent peroxidases in plasma, erythrocyte lysates, tissue homogenates, and cell lysates with a detection sensitivity ~ 0.5 mU/mL of GPx in samples.

#### Target Species

Mammals

#### Usage

For research use only (RUO)

#### Storage

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

#### Kit Components

GPx Assay Buffer 25 mL  
NADPH (lyophilized) 1 vial  
Glutathione Reductase 1 vial  
Glutathione (GSH; lyophilized) 1 vial  
Cumene Hydroperoxide 1 vial  
GPx Positive Control (lyophilized) 1 vial



CREATIVE **BIOMART**<sup>®</sup>  
Assay Kit

## Glutathione Peroxidase Assay Kit II

**Detection method** Colorimetric

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**Compatible Sample Types**

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

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