

## GSH/GSSG Assay Kit

### Product Information

#### Cat.No.

Kit-0395

#### Product Overview

GSH/GSSG Assay Kit is a quantitative colorimetric determination of GSH/GSSG at 412 nm.

#### Description

GLUTATHIONE, a tripeptide of glycine, glutamic acid and cysteine, is one of the key antioxidants involved in protecting cells from damages by reactive oxygen species. Glutathione (GSH) reduces disulfide bonds in cytoplasmic proteins to cysteines, in which it is converted to its oxidized form GSSG. GSH/GSSG Assay Kit is designed to accurately measure total, reduced and oxidized glutathione in biological samples using an enzymatic method that utilizes Ellman's Reagent (DTNB) and glutathione reductase (GR). DTNB reacts with reduced glutathione to form a yellow product. The rate of change in the optical density, measured at 412 nm, is directly proportional to glutathione concentration in the sample. This kit can also be used to measure oxidized (GSSG) by using a specific protocol which first scavenges all GSH with 1-methyl-2-vinylpyridinium triflate.

#### Applications

Direct Assays: total, reduced and oxidized glutathione in whole blood, plasma, serum, urine, tissue and cell extracts. Drug Discovery/Pharmacology: effects of drugs on glutathione metabolism.

#### Usage

For research use only (RUO)

#### Storage

Store all kit components at -20°C. Shelf life of six months after receipt.

#### Kit Components

Scavenger 500 µg; L2X Assay Buffer 25 mL; Glutathione Standard 50 µg; NADPH 40 µg; LGR Enzyme 120 µg; LDTNB 60 MI

**Detection method** Colorimetric



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

## GSH/GSSG Assay Kit

### Compatible Sample Types

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Cell Extract, Plasma, Serum, Tissue, Whole Blood, Urine

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### Features & Benefits

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Sensitive and accurate. Linear detection range 0.01-3  $\mu$ M GSH equivalents with a detection limit of 10 nM GSH equivalents.

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