

Glutathione Detection Kit (Blue Fluorescence)

Product Information

Cat

Kit-2326

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Product Overview

Glutathione (GSH) represents major low molecular-weight free thiol in living cells. As the key antioxidant in mammalian cells, intracellular GSH forms rapidly eliminated conjugates with electrophilic xenobiotics, free radicals as well as hydroperoxides. Insufficiency of cellular GSH results in oxidative stress damage and mitochondrial degeneration. Diminished levels of glutathione are symptomatic of cell stress thus; it is advantageous to monitor distribution of the intracellular GSH as an indicator of early apoptosis and cell death. Glutathione Detection Kit (Blue Fluorescence) utilizes Monochlorobimane (MCB), a non-fluorescent and cell-permeable dye, that forms highly fluorescent adducts with GSH (GSH-MCB) detectable at EX/EM= 380/465 ±20 nm respectively. The reaction is catalyzed by glutathione-S-transferase (GST) and the intensity of the fluorescence reflects the amount of intracellular GSH. Hence, our kit provides a useful tool for fast and easy evaluation of the GSH effectors directly in the living cells.

Applications

Rapid and sensitive detection of intracellular levels of GSH and activity of GST in live cells;
Screening for compounds affecting intracellular GSH levels

Storage

-20°C

Shipping

Gel Pack

Size

100 assays



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Kit Components

Wash Buffer; Monochlorobimane (MCB)

Detection method Fluorescence (Ex/Em = 380/460 nm)

Features & Benefits

Highly sensitive fluorometric method to measure intra-cellular Glutathione levels in response to a variety of biochemical stimuli;

Simple & High throughput-adaptable;

Reproducible, Quantitative tool for screening, studying, and characterizing compounds that affect Glutathione metabolism
