GST Activity Assay Kit (Fluorometric) ab65325

Overview

Product name: GST Activity Assay Kit (Fluorometric)
Detection method: Fluorescent
Sample type: Saliva, Urine, Serum, Plasma, Other biological fluids, Cell Lysate, Purified protein, Tissue Lysate
Assay type: Enzyme activity
Sensitivity: < 0.5 mU/well
Assay time: 2h 00m

Product overview

Abcam's GST Activity Assay Kit (Fluorometric) provides a simple, fluorescence-based in vitro assay for detecting the GST activity using fluorescence plate reader. The assay utilizes monochlorobimane (MCB), a dye that reacts with glutathione. The free form of MCB is almost nonfluorescent, whereas the dye fluoresces in blue (Ex/Em = 380/461 nm) after reaction with glutathione catalysed by GST. The change in fluorescence overtime allows for an easy measurement of the sample GST level.

The kit can detect GST activity in crude cell lysate or purified protein fraction, and also quantitate GST-tagged fusion protein. Visit our FAQs page for tips and troubleshooting.

Notes

Glutathione S-transferase (GST) is a family of enzymes that play an important role in detoxification of xenobiotics. GST catalyzes the formation of the thiol group of glutathione to electrophilic xenobiotics. It utilizes glutathione to scavenge potentially toxic compounds including those produced as a result of oxidative stress and is part of the defense mechanism against the mutagenic, carcinogenic and toxic effects of such compounds.

Platform

Microplate reader

Properties

Storage instructions: Store at -20°C. Please refer to protocols.

<table>
<thead>
<tr>
<th>Components</th>
<th>Identifier</th>
<th>100 tests</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glutathione (lyophilized)</td>
<td>Yellow</td>
<td>2 vials</td>
</tr>
<tr>
<td>GST Assay Buffer</td>
<td>WM</td>
<td>1 x 25ml</td>
</tr>
<tr>
<td>GST Standard (5 mU/µl)</td>
<td>Green</td>
<td>1 x 50µl</td>
</tr>
</tbody>
</table>
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Cellular localization

Cytoplasmic

<table>
<thead>
<tr>
<th>Components</th>
<th>Identifier</th>
<th>100 tests</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monochlorobimane Substrate</td>
<td>Red</td>
<td>1 x 200µl</td>
</tr>
</tbody>
</table>

Relevance

Standard Calibration Curve of GST Measured by Fluorometry.
Various amounts of standard GST were incubated with GSH and MCB according to the kit instructions. Fluorescence was measured at ex/em 380/460 nm.

Functional Studies - GST Activity Assay Kit (Fluorometric) (ab65325)

Please note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE"