abcam

Product datasheet

GST Assay Kit (Colorimetric) ab65326

11 References 2 Images

Overview

Product name	GST Assay Kit (Colorimetric)
Detection method	Colorimetric
Sample type	Urine, Serum, Plasma, Other biological fluids, Tissue Extracts, Cell Lysate
Assay type	Enzyme activity
Sensitivity	< 4 mU/well
Assay time	1h 30m
Species reactivity	**Reacts with:** Mammals, Other species
Product overview	GST Assay Kit (Colorimetric) (ab65326) is used to detect GST activity in crude cell lysates and purified protein fractions, and also to quantitate GST-tagged fusion proteins. The GST assay protocol is based on the GST-catalyzed reaction between GSH and the GST substrate CDNB. CDNB has the broadest range of isozyme detectability (e.g., alpha-, mu-, pi-, and other GST isoforms). The GST-catalyzed formation of GS-DNB produces a dinitrophenyl thioether which can be detected by spectrophotometer at 340 nm. One unit of GST activity is defined as the amount of enzyme producing 1 µmol of GS-DNB conjugate/min under the conditions of the assay. Detection limit of assay: active GST < 1 mU. GST assay protocol summary: - add samples and positive control to wells - add glutathione to wells - add reaction mix - analyze with a microplate reader for at least 10 min
Notes	This product is manufactured by BioVision, an Abcam company and was previously called K263 GST Colorimetric Activity Assay Kit. K263-100 is the same size as the 100 test size of ab65326. Glutathione S-transferase (GST, EC 2.5.1.13) 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

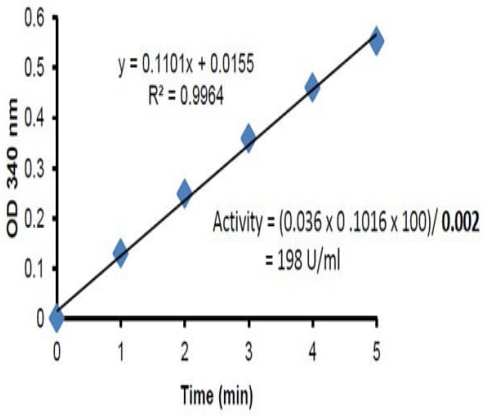
Storage instructions Store at -20°C. Please refer to protocols.

Components	100 tests
Reducing Agent I	2 x 17mg
GST Assay Buffer	1 x 25ml
GST Positive Control	1 x 10µl
GST Substrate	1 x 0.1ml

Relevance 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. Based on their biochemical, immunological, and structural properties, the soluble human GSTs are categorized into 4 main classes: alpha, mu, pi, and theta.

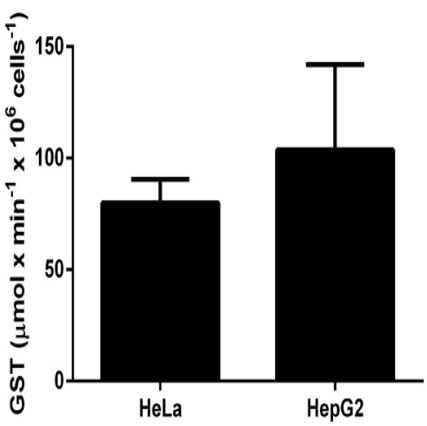
Cellular localization Cytoplasmic

Images



Functional Studies - GST Activity Assay Kit (Colorimetric) (ab65326)

GST Kinetic Assay performed according to the protocol.



Functional Studies - GST Activity Assay Kit (Colorimetric) (ab65326)

GST activity calculated in cell lysates, with background signal subtracted (duplicates +/- SD), using equation in protocol.

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