ARG82167
Glutathione S-transferase Activity Assay Kit (Colorimetric)

Package: 100 tests
Store at: 4°C

Summary

Product Description	ARG82167 Glutathione S-transferase Activity Assay Kit (Colorimetric) can be used to measure Glutathione S-transferase activity in cell lysates and tissues.
Tested Reactivity	Hu, Ms, Rat, All
Tested Application	FuncSt
Target Name	Glutathione S-transferase
Conjugation Note	Read at 340 nm
Sensitivity	2 U/L
Detection Range	2 - 80 U/L
Sample Type	cell lysates and tissues
Sample Volume	20 µl
Alternate Names	GST HB subunit 4; MU-1; GST class-mu 1; GST1; Glutathione S-transferase Mu 1; GSTM1-1; GSTM1a-1a; MU; GTH4; EC 2.5.1.18; GSTM1b-1b; H-B; GTM1

Application Instructions

Application Note	Please note that this kit does not include a microplate.
Assay Time	10 min

Properties

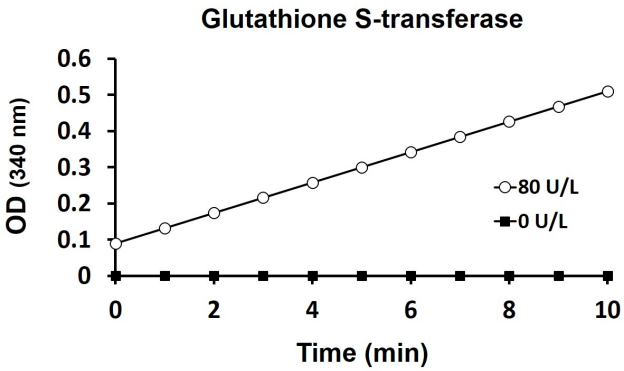
Form	Liquid
Storage instruction	Store the kit at 2-8°C. Do not expose test reagents to heat, sun or strong light during storage and usage. Please refer to the product user manual for detail temperatures of the components.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol	GSTM1
Gene Full Name	glutathione S-transferase mu 1
Background	Cytosolic and membrane-bound forms of glutathione S-transferase are encoded by two distinct supergene families. At present, eight distinct classes of the soluble cytoplasmic mammalian glutathione S-transferases have been identified: alpha, kappa, mu, omega, pi, sigma, theta and zeta. This gene encodes a glutathione S-transferase that belongs to the mu class. The mu class of enzymes functions in the detoxification of electrophilic compounds, including carcinogens, therapeutic drugs, environmental toxins and products of oxidative stress, by conjugation with glutathione. The genes encoding the mu class of enzymes are organized in a gene cluster on chromosome 1p13.3 and are known to be highly polymorphic. These genetic variations can change an individual's susceptibility to carcinogens and toxins as well as affect the toxicity and efficacy of certain drugs. Null mutations of this class mu gene

	have been linked with an increase in a number of cancers, likely due to an increased susceptibility to environmental toxins and carcinogens. Multiple protein isoforms are encoded by transcript variants of this gene. [provided by RefSeq, Jul 2008]
Function	Conjugation of reduced glutathione to a wide number of exogenous and endogenous hydrophobic electrophiles. [UniProt]
Cellular Localization	Cytoplasm. [UniProt]

Images



ARG82167 Glutathione S-transferase Activity Assay Kit (Colorimetric) enzyme kinetics graph

Kinetics of 0 and 80 U/L Glutathione S-transferase reaction, using ARG82167 Glutathione S-transferase Activity Assay Kit (Colorimetric).