

## ARG82117 Glutathione Peroxidase Assay Kit

Package: 100 tests  
Store at: -20°C

### Component

Cat. No.	Component Name	Package
ARG82117-001	Assay Buffer	25 ml
ARG82117-002	GR Enzyme	250 µl
ARG82117-003	Glutathione	1 vial (lyophilized)
ARG82117-004	NADPH	1 vial (lyophilized)
ARG82117-005	Standard	1 vial (lyophilized)
ARG82117-006	Peroxide Solution	50 µl

### Summary

Product Description	ARG82117 Glutathione Peroxidase Assay Kit is a detection kit for the quantification of Glutathione Peroxidase activity in serum, plasma, tissue and cell lysates.
Tested Reactivity	All
Tested Application	FuncSt
Target Name	Glutathione Peroxidase
Conjugation Note	Read at 340 nm.
Sensitivity	40 U/l
Detection Range	40 - 800 U/l
Sample Type	Serum, plasma, tissue and cell lysates.
Sample Volume	10 µl
Alternate Names	GPXD; Glutathione peroxidase 1; GPx-1; Cellular glutathione peroxidase; EC 1.11.1.9; GSHPX1; GSHPx-1

### Application Instructions

Application Note	Note: Please note that this kit does not include a microplate.
Assay Time	20 min

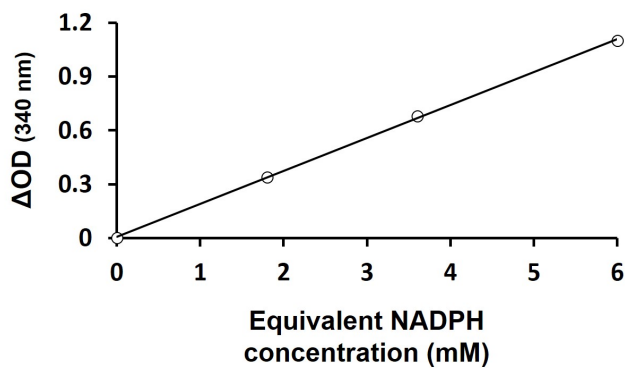
### Properties

Form	Liquid
Storage instruction	Store the kit at -20°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	GPX1
Gene Full Name	glutathione peroxidase 1
Background	This gene encodes a member of the glutathione peroxidase family. Glutathione peroxidase functions in the detoxification of hydrogen peroxide, and is one of the most important antioxidant enzymes in humans. This protein is one of only a few proteins known in higher vertebrates to contain selenocysteine, which occurs at the active site of glutathione peroxidase and is coded by UGA, that normally functions as a translation termination codon. In addition, this protein is characterized in a polyalanine sequence polymorphism in the N-terminal region, which includes three alleles with five, six or seven alanine (ALA) repeats in this sequence. The allele with five ALA repeats is significantly associated with breast cancer risk. Two alternatively spliced transcript variants encoding distinct isoforms have been found for this gene. [provided by RefSeq, Jul 2008]
Function	Protects the hemoglobin in erythrocytes from oxidative breakdown. [UniProt]
PTM	During periods of oxidative stress, Sec-49 may react with a superoxide radical, irreversibly lose hydroselenide and be converted to dehydroalanine. [UniProt]
Cellular Localization	Cytoplasm. [UniProt]

## Images



ARG82117 Glutathione Peroxidase Assay Kit standard curve image

ARG82117 Glutathione Peroxidase Assay Kit results of a typical standard run with optical density reading at 340 nm.