

## Glutathione (GSH) ELISA Kit

Catalogue No.:BTA14681

Glutathione (GSH) ELISA Kit is an ELISA Kit for the in vitro quantitative measurement of Glutathione concentrations in serum, plasma, tissue homogenates, cell lysates and other biological fluids.

Target:	Glutathione (GSH)
Reactivity:	General
Tested Applications:	ELISA
Recommended dilutions:	Optimal dilutions/concentrations should be determined by the end user.
Storage:	Shipped at 4 °C. Upon receipt, store the kit according to the storage instruction in the kit's manual.
Validity:	The validity for this kit is at least 6 months. Up to 12 months validity can be provided on request.
Stability:	The stability of the kit is determined by the rate of activity loss. The loss rate is less than 5% within the expiration date under appropriate storage conditions. To minimize performance fluctuations, operation procedures and lab conditions should be strictly controlled. It is also strongly suggested that the whole assay is performed by the same user throughout.
Test Range:	1.56 µg/ml - 100 µg/ml
Sensitivity:	0.94 µg/ml
Standard Form:	Lyophilized
Detection Method:	Colorimetric
Assay Type:	Competitive
Assay Data:	Quantitative
Sample Type:	Serum, plasma, tissue homogenates, cell lysates and other biological fluids.
Target Type:	Antigen



Assay Principle:	This kit is based on competitive enzyme-linked immuno-sorbent assay technology. An antigen is pre-
	coated onto a 96-well plate. Standards, test samples, and biotin-conjugated reagent are added to
	the wells and incubated. A competitive inhibition reaction takes place between the the pre-coated
	GSH and the GSH in the sample with the biotin-labelled antibody. The HRP-conjugated reagent is
	then added, and the whole plate is incubated. Unbound conjugates are removed using wash buffer
	at each stage. TMB substrate is used to quantify the HRP enzymatic reaction. After TMB substrate is
	added, only wells that contain sufficient GSH will produce a blue coloured product, which then
	changes to yellow after adding the acidic stop solution. The intensity of the color yellow is inversely
	proportional to the GSH amount bound on the plate. The OD is measured spectrophotometrically at
	450 nm in a microplate reader, from which the concentration of GSH can be calculated.

Kit Components:

The kit components listed are for reference only. The product manual may differ slightly. The product should be used as stated on the product manual included and delivered together with the product. • Pre-coated 96-Well Microplate

- Standard
- Standard Diluent Buffer
- Wash Buffer
- Detection Reagent A
- Detection Reagent B
- Diluent A
- Diluent B
- TMB Substrate
- Stop Solution
- Plate Sealer

## Material Required But• 37°C incubator

Not Provided:

- Multi and single channel pipettes and sterile pipette
- Squirt bottle or automated microplate
- washer
- 1.5 ml tubes
- Distilled water
- Absorbent filter papers
- 100 ml and 1 liter graduated cylinders
- Microplate reader (wavelength: 450 nm)

**Reagent Preparation:** 

This procedure is provided for reference only. The product manual may differ slightly. The product should be used as stated on the product manual included and delivered together with the product.

- 1) Standard: Prepare the standard with the recommended volume of Standard Diluent Buffer, to make the standard solution. Then use the Standard Diluent buffer to carry out serial dilutions of the standard solution, as instructed in the Protocol.
- 2) Wash Buffer: Dilute the concentrated Wash Buffer with distilled water, as instructed in the Protocol.
- 3) Detection Reagent Preparation: Calculate the total volume of working solution required. Dilute Detection Reagent A and Detection Reagent B with Diluent A and Diluent B, respectively, at



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Note:

This product is for research use only.

The range and sensitivity is subject to change. Please contact us for the latest product information. For accurate results, sample concentrations must be diluted to mid-range of the kit. If you require a specific range, please contact us in advance or write your request in your order comments. Please note that our ELISA and CLIA kits are optimised for detection of native samples, rather than recombinant proteins. We are unable to guarantee detection of recombinant proteins, as they may have different sequences or tertiary structures to the native protein.