

Free Thiol Assay Kit (Fluorometric) ab112158

★★★★★ [1 Abreviews](#) [3 References](#) [4 图像](#)

概述

产品名称	Free Thiol Assay试剂盒(Fluorometric)
检测方法	Fluorescent
样品类型	Urine, Plasma, Cell culture extracts
检测类型	Quantitative
检测时间	0h 20m
产品概述	This product is not suitable for protein samples.

Free Thiol Assay Kit (Fluorometric) (ab112158) provides an ultrasensitive fluorometric assay to quantitate thiol content that exists in small molecules such as free cysteine, glutathione, and cysteine residues. The assay is based on a proprietary non-fluorescent dye tha generates a strongly fluorescent adduct upon reacting with a thiol compound. The signal produced by the adduct can ebe asily read by a fluorescence microplate reader at Ex/Em = 490/520 nm. In addition, both absorption and emission spectra of the thiol adduct are pH-independent, making the assay highly robust. There are few reagents or assay kits available for quantitating thiol content in biological systems, and the majority of commercial kits either lack sensitivity or have tedious protocols. The assay can detect as little as 1 picomole of cysteine or GSH in a 100 μ L assay volume (10 nM).

Please note it is not possible to do a quantification in comparison to the standard.

Free Thiol assay protocol summary:

- add samples and standards to wells
- add reaction mix
- analyze with microplate reader for 10 min to 1 hr

说明 This product was previously called Thiol Quantification Assay Kit (Fluorometric).

This product detects thiol groups on small molecules. If you want to detect thiol groups in proteins, we recommend **Total Protein Thiol Quantification Assay Kit (Colorimetric) (ab219272)**.

平台 Microplate reader

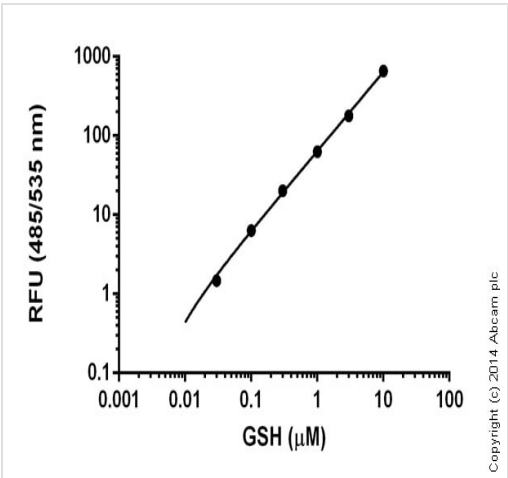
性能

存放说明

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

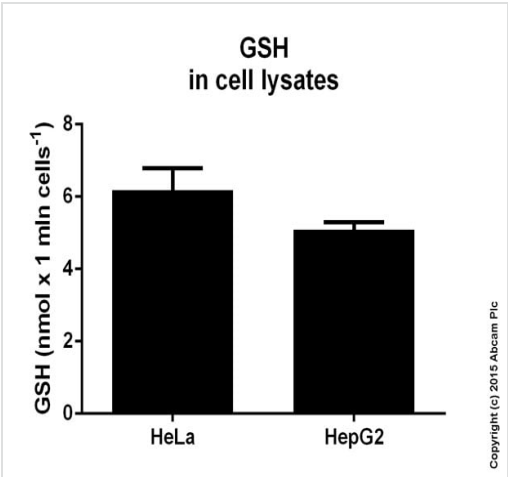
组件	200 tests
Assay Buffer	1 x 25ml
DMSO	1 x 200μl
GSH Standard	1 x 62μg
Thiol Green Indicator	1 vial

图片



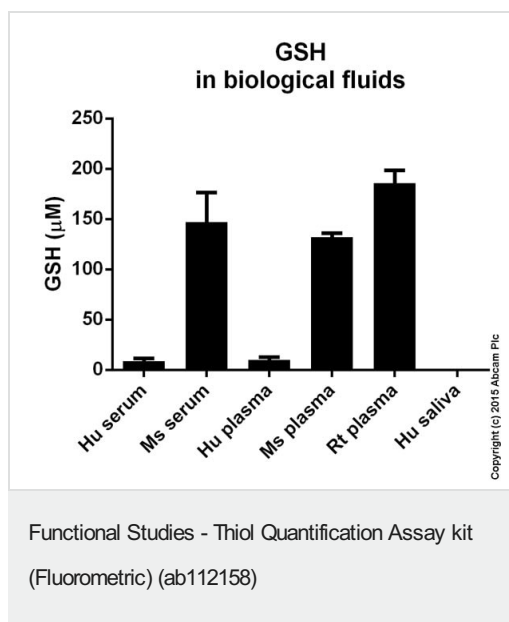
Standard curve: mean of duplicates (+/- SD) with background reads subtracted

Functional Studies - Thiol Quantification Assay kit
(Fluorometric) (ab112158)

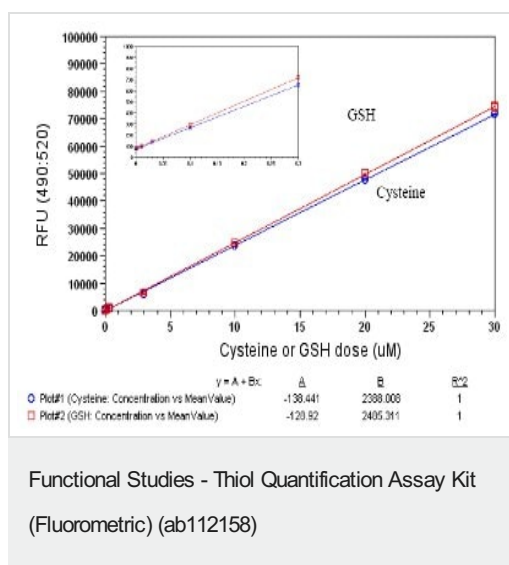


GSH measured in cell lysates showing quantity (nmol) per 1 mln cells.
Samples with the concentration of 1e8 cells/mL were used.
Samples were diluted 100-1000 fold.

Functional Studies - Thiol Quantification Assay kit
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GSH measured in biological fluids. Samples were diluted 10-1000 fold.



GSH and Cysteine dose responses were measured in a 96-well black plate with ab112158 using a microplate reader. As low as 10 nM (1 pmol/well) of GSH or Cysteine can be detected with 10 minutes incubation time (n=3). The insert shows the low levels of thiol detection.

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