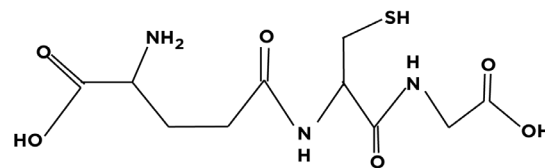


STRESS

OXIDATIVE
STRESS

METABOLISM

DetectX[®] Glutathione (GSH) Detection Kits



Glutathione, the major endogenous antioxidant produced by cells, plays a critical role in protecting organisms from oxidative stress and related cytotoxicity. The ratio of reduced (GSH) and oxidized (GSSG) glutathione is an important measure of a cell's ability to maintain redox homeostasis. Assessing GSH status is critical for studying oxidative stress mechanisms and downstream effects of oxidative damage.

Our DetectX[®] Glutathione (GSH) Detection Assay Kits allow for convenient, rapid, and easy quantitation of both GSH and GSSG for an accurate measurement of a cell's oxidative status in a variety of sample types.

DetectX[®] Glutathione Colorimetric Detection Kit (K006-H1)



- **Measure** glutathione in **20 minutes** or kinetically
- **Sample types:** lysates, WB, RBCs, serum, plasma, urine, tissue
- **Measure** up to **89 (Oxidized or Total)** in duplicate
- **Cited** in over **50 publications**
- **4°C** stable reagents

DetectX[®] Glutathione Colorimetric Cuvette Detection Kits (K006-H1C-L/H1C-H)



- **Measure** glutathione in **20 minutes** or kinetically
- **Sample types:** lysates, WB, RBCs, serum, plasma, urine, tissue
- **Measure** 200 determinations
- **Adaptable** - 8.5(-L) or 15(-H) beam heights
- **4°C** stable reagents

DetectX[®] Glutathione Fluorescent Detection Kits (K006-F1/F5)



- **Measure** free and total glutathione in the same well
- **Sample types:** lysates, WB, RBCs, serum, plasma, urine, tissue
- **Measure** up to **39 or 231** in duplicate
- **Cited** in over **50 publications**
- **4°C** stable reagents

DetectX[®] Glutathione Fluorescent Detection Kit 384-Well Plate (K006-F1D)



- **Measure** free or oxidized glutathione in **15 minutes**
- **Sample types:** lysates, WB, RBCs, serum, plasma, urine, tissue
- **Measure** **183 (Free or Oxidized)** in duplicate
- **4°C** stable reagents

DetectX® Glutathione Detection Kits Comparison

Features	K006-H	K006-H1C-L (Cuvette)	K006-F
Uses	Measure Glutathione in 20 minutes or kinetically	Measure Glutathione in 20 minutes or kinetically	Measure Free and Total Glutathione in same well
Detection	Colorimetric detection at 405nm in 96 well plates	A UV/Visible spectrophotometer capable of reading optical absorption at 405-412 nm 8.5(-L) or 15(-H) mm Beam Height L/-H refer to Spectrophotometer beam height	Detection at 510 nm in a fluorescent plate reader with excitation at 390 nm
Sample Types	Lysates, WB, RBC's, Serum, Plasma, Urine and Tissue	Lysates, WB, RBC's, Serum, Plasma, Urine and Tissue	Lysates, WB, RBC's, Serum, Plasma, Urine and Tissue
Standard GSH	25-0.781 uM	25-0.781 uM	25-0.195 uM
Standard GSSG	12.5-0.391 uM	12.5-0.391 uM	
Sensitivity	0.634 uM	0.634 uM	More Sensitive 45 nM
Limit of Detection	1.78 uM	1.78 uM	38 nM
Precision	Intra-Assay CV: (2.1%, 3.1%, 5.0%) Inter-Assay CV: (7.5%, 8.4%, 13.3%)	Intra-Assay CV: (2.1%, 3.1%, 5.0%) Inter-Assay CV : (7.5%, 8.4%, 13.3%)	Intra-Assay CV: (4.7%, 4.7%, 2.7%, 2.3%) Inter-Assay CV: (8.3%, 10.0%, 6.0%, 8.0%)

RELATED DetectX® KITS

- Catalase Colorimetric Activity Kit (**K033-H1**)
- Catalase Fluorescent Activity Kit (**K033-F1**)
- FRAP™ (Ferric Reducing Antioxidant Power) Detection Kit (**K043-H1**)
- Glutathione Reductase (GR) Fluorescent Activity Kit (**K009-F1**)
- Glutathione S-Transferase (GST) Fluorescent Activity Kit (**K008-F1**)
- Hydrogen Peroxide (H₂O₂) Colorimetric Detection Kit (**K034-H1**)
- Hydrogen Peroxide (H₂O₂) Fluorescent Detection Kit (**K034-F1**)
- TBARS/MDA Universal Colorimetric Detection Kit (**K077-H1**)
- Superoxide Dismutase (SOD) Activity Kit (**K028-H1**)