



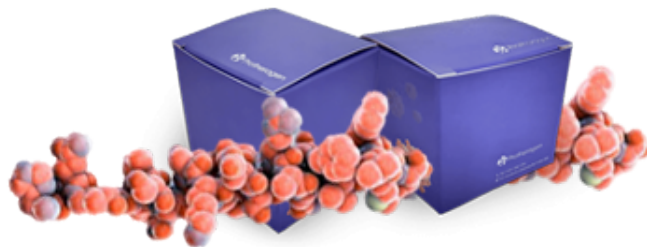
Bovine glutathione peroxidase 1 (GPX1) ELISA kit (0.312-20 ng/mL)

Cat. No.:	0126WXX-300
Assay Type:	Quantitative sandwich ELISA
Target Species:	Bovine
Assay Target:	GPX1
Size:	48T; 96T

This product is for research use only and is not intended for diagnostic use.

Product Overview

Description	Bovine glutathione peroxidase 1 (GPX1) ELISA kit (0.312-20 ng/mL) is an ELISA-based <i>in vitro</i> research tool designed specifically for the quantitative detection of GPX1 in bovine samples with a range of 0.312-20 ng/mL and a minimum detectable dose (sensitivity) of up to 0.06 ng/mL. The kit is highly sensitive and easy to use.
Assay Principle	The ELISA analytical biochemical technique is based on GPX1 antibody-GPX1 antigen interactions (immunosorbency) and an HRP colorimetric detection system to detect GPX1 antigen targets in samples.
Background	GPX1 is an antioxidant enzyme widely distributed in the cytoplasm, mitochondria, and nucleus. It exists as a homotetramer and primarily functions to protect cells and enzymes from oxidative damage. GPX1 maintains intracellular redox homeostasis by catalyzing the reduction of hydrogen peroxide and lipid peroxides. It plays a crucial role in multiple biological processes, including apoptosis, lipid metabolism, inflammatory responses, and the response to oxidative stress. Oxidative stress is considered one of the causes for the development of obesity-related metabolic disorders. GPX-1 is a potential regulator of obesity.
Synonyms	GSHPX1; Cellular glutathione peroxidase
Formula Weight	10,289 Da

**Applications**

Bovine glutathione peroxidase 1 (GPX1) ELISA kit (0.312-20 ng/mL) is used to quantify GPX1 in serum, plasma, and cell culture supernatant of bovine, providing data to support research in a wide range of areas, including endocrinology, inflammation, oxidative stress, metabolism, obesity, and others.

Research Area

Endocrinology; Inflammation; Oxidative stress; Metabolism; Obesity

Specification

Sample Type	Serum; Plasma; Cell culture supernatant
Detection Range	0.312-20 ng/mL
Sensitivity	Up to 0.06 ng/mL
Precision (Intra-assay)	CV≤8%
Precision (Inter-assay)	CV≤12%
Cross-reactivity	No significant cross-reactivity or interference was observed.
Recovery	70-110%
Storage	Store at 2-8°C.