

## Native Bovine Glutathione Peroxidase

### Product Information

<b>Cat#</b>	NATE-0322
<b>Abbr</b>	GSH-Px, Native (Bovine)
<b>Alias</b>	GSH-Px
<b>Similar</b>	GSH-Px
<b>Species</b>	Bovine
<b>Source</b>	Bovine erythr ocytes
<b>Description</b>	Glutathione peroxidase is an enzyme which reduced lipid hydroperoxides into their corresponding alcohols. It also reduces free hydrogen peroxide in to water. In vivo it is responsible for protecting hemoglobin from oxidative breakdown.
<b>Applications</b>	Glutathione peroxidase from bovine erythr ocytes was used as a positive control in cloning and characterization of full-length cDNAs encoding two glutathione peroxidases (GpXs) from <i>Globodera rost ochiensis</i> . It was used for the determination of glutathione peroxidase activity in human milk.
<b>Form</b>	Lyophilized powder containing 25% sucrose and 2.5% dithiothreitol with sodium phosphate buffer salts
<b>Enzyme Commission Number</b>	EC 1.11.1.9
<b>Activity</b>	> 300 units/mg protein
<b>CAS No.</b>	9013-66-5
<b>Molecular Weight</b>	mol wt 84.5 kDa
<b>Unit Definition</b>	One unit will catalyze the oxidation by H <sub>2</sub> O <sub>2</sub> of 1.0 μmole of reduced glutathione to oxidized glutathione per min at pH 7.0 at 25°C.
<b>Storage</b>	-20°C
<b>Warnings</b>	At the reported pH optimum of 8.8, we have found the activity to be approx. 10 times



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that at pH 7.0. However, to remain consistent with literature and avoid complications arising from non-enzymatic oxidation of GSH, our unit is defined at pH 7.0.

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**Synonyms**

EC 1.11.1.9; GSH peroxidase; selenium-glutathione peroxidase; reduced glutathione peroxidase; 9013-66-5; GSH-Px, Glutathione:hydrogen-peroxide oxido-reductase; Glutathione Peroxidase

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