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# Glutathione Reductase from baker's yeast

**Product Number:** G8810

Enzymatic Activity: 100-300 units/mg protein

**Storage Temperature: 2-8 ° C** 

### **Product Description**

Enzyme Commission (EC) Number: 1.6.4.2

CAS Number: 9001-48-3 Molecular Weight: 124 kDa

Glutathione reductase from Baker's yeast is a flavoprotein homodimer consisting of two equal subunits. Each subunit has one mole of FAD which is noncovalently bound. Glutathione reductase is also a sulfhydryl protein containing a total of six sulfhydryl groups. The enzyme catalyzes the following reaction:

Glutathione(Oxidized) +  $\beta$  -NADPH  $\rightarrow \beta$  -NADP + 2 Glutathione(Reduced)

The Km values for the enzyme are: oxidized glutathione (61  $\mu$ M) and  $\beta$  -NADPH (7.6  $\mu$ m).

Gltathione reductase is inhibited by the following inhibitors:

N-alkylmaleimides; benzylselenosulphate; 2-chloroethylisocyanate; Cu<sup>2+</sup>; 2,4-dihydroxybenzylamine;

1-fluoro-2,4-dinitrobenzene; p-nitrobenzylselenosulphate; 2-triazine-5-nitrofuran

#### **Unit Definition**

One unit will reduce 1.0 µmole of oxidized glutathione per min at pH 7.6 at 25 °C.

### Physical form

Suspension in 3.6 M (NH4)2SO4, pH 7.0, containing 0.1 mM dithiothreitol

### **Precautions and Disclaimer**

For Laboratory Use Only. Not for drug, household or other uses.

## Storage/Stability

This product is offered as an ammonium sulfate suspension. Diluted stock solutions should not be prepared.