



## Product Datasheet

<b>Product Name</b>	Glutaredoxin 1 Yeast Recombinant
<b>Cata No</b>	CB501370
<b>Source</b>	<i>Escherichia Coli.</i>
<b>Synonyms</b>	Thioltransferase, GRX, GLRX1, GRX1, GRX-1, GLRX-1, Glutathione-dependent oxidoreductase 1, Glutaredoxin 1.

### Description

GRX1 has a glutathione-disulfide oxidoreductase activity in the presence of nadph and glutathione reductase. Reduces low molecular weight disulfides and proteins.

Glutaredoxin is a glutathione (GSH)-dependent hydrogen donor for ribonucleotide reductase and also catalyzes glutathione-disulfide oxidoreduction reactions in the presence of NADPH and glutathione reductase. GRX1 is multifunctional enzyme with glutathione-dependent oxidoreductase, glutathione peroxidase and glutathione S-transferase (GST) activity. The disulfide bond functions as an electron carrier in the glutathione-dependent synthesis of deoxyribonucleotides by the enzyme ribonucleotide reductase. In addition, it is also involved in reducing cytosolic protein- and non-protein-disulfides in a coupled system with glutathione reductase. Required for resistance to reactive oxygen species (ROS) by directly reducing hydroperoxides and for the detoxification of ROS-mediated damage.  
Glutaredoxin *Saccharomyces cerevisiae*

Recombinant containing 6x His tag at C-Terminus produced in E.Coli is a single, non-glycosylated, Polypeptide chain having a molecular mass of 16 kDa.

### Physical Appearance

Sterile Filtered clear colorless solution.

### Purity

Greater than 90% as determined by SDS-PAGE.

### Formulation

Glutaredoxin solution contains 25mM Tris-HCl pH-7.5 & 0.01% Na Azide.

### Stability

1 week at 2-10°C. For long term store at -20 to -80°C.

### Applications

ELISA, Western Blot, strongly binds to glutathione, reduced and oxidized.