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# Certificate of Analysis and Data Sheet Recombinant Yeast Glutaredoxin 1

**Catalog No.**  
228-10584

**Source:**  
*Escherichia Coli.*

### ***Synonyms***

Thioltransferase, GRX, GLRX1, GRX1, GRX-1, GLRX-1, Glutathione-dependent oxidoreductase 1, Glutaredoxin 1.

### ***Introduction***

GLRX1 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. GLRX1 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.

### ***Description***

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.

### ***Formulation***

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

### ***Stability***

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

### ***Purity***

Greater than 90% as determined by SDS-PAGE.

### ***Applications***

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

**The products are furnished for LABORATORY RESEARCH USE ONLY.  
Not for diagnostic or therapeutic use.**