

---

**Product Data Sheet**


---

Product Name: GLRX1 Human

Cat. No.: GP21683

Batch No.: 1

**Product Data**

Purity	>98%	Source	Escherichia Coli.
Physical Appearance	solid	Shipping Condition	Shipped with Ice Packs.
Synonyms	Thioltransferase; GRX; GLRX1; GRX1; GRX-1; GLRX-1; Glutathione-dependent oxidoreductase 1; Glutaredoxin-1; Thioltransferase-1; TTase-1; GLRX; MGC117407.		
Amino Acid Sequence	MAQEFVNCKI QPGKVVVFIK PTCPYCRRRAQ EILSQLPIKQ GLLEFVDITA TNHTNEIQDY LQQLTGARTV PRVFIGKDCI GGCSDLVSLQ QSGELLTRLK QIGALQ.		
Formulation	Glutaredoxin solution (1mg/ml) contains 20mM Tris-HCl pH-8, 1mM DTT & 10% Glycerol.		

**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.

**Stability**

Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer

**Caution: Product has not been fully validated for medical applications. For research use only.**

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA

---

## Product Data Sheet

---

periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles.

### Background

Glutaredoxin Human Recombinant produced in E.Coli is a single, non-glycosylated, Polypeptide chain containing 106 amino acids having a molecular mass of 11.7 kDa.

**Caution: Product has not been fully validated for medical applications. For research use only.**

**Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com**

**Address: 10292 Central Ave. #205, Montclair, CA, USA**