

Synonym

GLRX,GRX,TTase-1,GLRX1,GRX1

Source

Human Glutaredoxin 1, His Tag (GLX-H5149) is expressed from E.coli cells. It contains AA Met 1 - Gln 106 (Accession # NP_001112362).

Predicted N-terminus: Met 1

Molecular Characterization

Poly-his GLRX1(Met 1 - Gln 106)
NP_001112362

This protein carries a polyhistidine tag at the N-terminus.

The protein has a calculated MW of 12.7 kDa. The protein migrates as 12 kDa under reducing (R) condition (SDS-PAGE).

Endotoxin

Less than 1.0 EU per µg by the LAL method.

Purity

>95% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 µm filtered solution in 50 mM Tris, 150 mM NaCl, pH7.5 with 1 mM DTT. Normally trehalose is added as protectant before lyophilization.

Contact us for customized product form or formulation.

Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

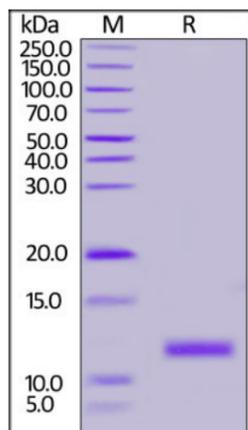
Storage

For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE

Human Glutaredoxin 1, His Tag on SDS-PAGE under reducing (R) condition.

The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.

Background

Glutaredoxin-1 (GRX1) is also known as Thiols transferase-1 (TTase-1), GLRX, GRX, GLRX1, which belongs to the glutaredoxin family. GRX1 / GLRX contains one glutaredoxin domain, which exists in either a reduced or an oxidized form. GRX1 / GLRX has a glutathione-disulfide oxidoreductase activity in the presence of NADPH and glutathione reductase and functions as electron carriers in the glutathione-dependent synthesis of deoxyribonucleotides by the enzymatic ribonucleotide reductase.

References

- (1) [Papov V.V., et al., 1994, Protein Sci. 3:428-434.](#)
- (2) [Yang Y., et al., 1998, Biochemistry 37:17145-17156.](#)

Please contact us via TechSupport@acrobiosystems.com if you have any question on this product.