

# Recombinant human Glutaredoxin 3/GLRX3 protein

Catalog Number: ATGP0551

## PRODUCT INFORMATION

---

### Expression system

E.coli

### Domain

1-335aa

### UniProt No.

O76003

### NCBI Accession No.

NP\_006532

### Alternative Names

Glutaredoxin-3, GRX3, PKC-interacting cousin of thioredoxin, PKC-theta-interacting protein, PKCq-interacting protein, Thioredoxin-like protein 2, Glutaredoxin 4, GLRX4, GRX4, PICOT, TXNL2, HUSSY-22, bA500G10.4

## PRODUCT SPECIFICATION

---

### Molecular Weight

39.6 kDa (355aa) confirmed by MALDI-TOF

### Concentration

0.5mg/ml (determined by Bradford assay)

### Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 10% glycerol, 1mM DTT

### Purity

> 95% by SDS-PAGE

### Tag

His-Tag

### Application

SDS-PAGE

### Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

## BACKGROUND

---

### Description

Glutaredoxin (GRX), also known as thioltransferase, is member of the thiol-disulfide oxidoreductase family. Glutaredoxin catalyzes the reversible reduction of protein-glutathionyl mixed disulfides to free sulfhydryl groups through a monothiol mechanism. Glutaredoxin-3 (Grx3/PICOT) is an essential protein involved in the regulation of signal transduction, for instance during immune cell activation and development of cardiac hypertrophy, presumably in response to redox signals. And it has been shown to interact with PRKCQ. Recombinant human

# Recombinant human Glutaredoxin 3/GLRX3 protein

Catalog Number: ATGP0551

Glutaredoxin-3, fused to His-tag at N-terminus, was expressed in *E. coli* and purified by using conventional chromatography techniques.

## Amino acid Sequence

MGSSHHHHHHH SSGLVPRGSH MAAGAAEAAV AAVEEVGSAG QFEELLRLKA KSLLVVHFWA PWAPQCAQMN  
EVMAELAKEL PQVSFVKLEA EGVPEVSEKY EISSVPTFLF FKNSQKIDRL DGAHAPELTK KVQRHASSGS FLPSANEHLK  
EDLNLRLKKL THAAPCMLFM KGTPQEPRCG FSKQMVEILH KHNIQFSSFD IFSDEEVRQG LKAYSSWPTY PQLYVSGELI  
GGLDIIKELE ASEELDTICP KAPKLEERLK VLTNKASVML FMKGNKQEAQ CGFSKQILEI LNSTGVEYET FDILEDEEVR  
QGLKAYSNWP TYPQLYVKGE LVGGLDIVKE LKENGELLPI LRGEN

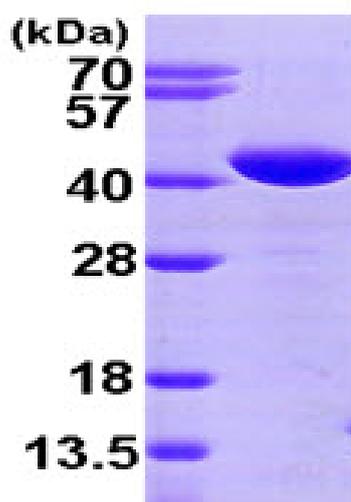
## General References

Witte S., et al. (2000) *J Biol Chem* 275(3): 1902-9.

Haunhorst P., et al. (2010) *Biochem Biophys Res Commun.* 394(2):372-6

## DATA

### SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.

15% SDS-PAGE (3ug)