# **PRODUCT INFORMATION**

**Expression system** E.coli

**Domain** 1-107aa

UniProt No. Q9QUH0

NCBI Accession No. NP\_444338

Alternative Names Glutaredoxin-1, C86710, D13Wsu156e, Glrx1, Grx1, Ttase, Thioltransferase-1

# **PRODUCT SPECIFICATION**

Molecular Weight 14.3 kDa (130aa) confirmed by MALDI-TOF

**Concentration** 0.5mg/ml (determined by BCA assay)

**Formulation** Liquid in. 20mM MES buffer (pH 5.0) containing 20% glycerol, 0.1M NaCl

**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

Glrx, also known as glutaredoxin-1, is member of the thiol-disulfide oxidoreductase family. Glutraredoxin catalyzes the reversible reduction of protein-glutathionyl mixed disulfides to free sulfhydryl groups though a monothiol mechanism. Mammalian Glutaredoxin is known to have two isoforms, GRX1 and GRX2. GRX1 is a cytosolic protein, whereas GRX2 is localized both in the mitochondria and nucleus. Glrx may be involved in a various cellular events such as signal transduction, stress response, and metabolic regulation by regulating the redox status of cellular proteins. Recombinant mouse Glrx protein was expressed in E. coli and purified by using



conventional chromatography techniques.

#### **Amino acid Sequence**

MGSSHHHHHH SSGLVPRGSH MGSMAQEFVN CKIQSGKVVV FIKPTCPYCR KTQEILSQLP FKQGLLEFVD ITATNNTSAI QDYLQQLTGA RTVPRVFIGK DCIGGCSDLI SMQQTGELMT RLKQIGALQL

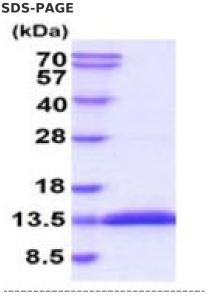
coomassie blue stain.

3ug by SDS-PAGE under reducing condition and visualized by

#### **General References**

Reynaert NL., et al. (2006) Proc Natl Acad Sci U S A. 103(35):13086-91. Kanda M., et al. (2006) J Biol Chem. 281(39):28518-28.

### DATA



15% SDS-PAGE (3ug)