

GSR, 43-522aa, Human, His tag, E.coli

Cat.NO.: TP02345

3th Edition

Synonyms: Glutathione reductase, GLUR, GRD1.

Description: Glutathione reductase, also known as GSR, is a member of the class-I pyridine nucleotide-disulfide oxidoreductase family. This enzyme is a homodimeric flavoprotein and plays a role in maintaining glutathione (GSH) in its reduced form by catalyzing the reduction of glutathione disulfide (GSSG): $GSSG + NADPH + H^+ \rightarrow 2GSH + NADP^+$.

Form: Liquid. In 20mM Tris-HCl buffer (pH 8.0) containing 1mM DTT, 10% glycerol, 0.1M NaCl

Molecular Weight: 54.3 kDa (504aa) confirmed by MALDI-TOF

Sequences:

MGSSHHHHHSSGLVPRGSHMGSMAMACRQEPQPQGPppAAGAVASYDYLVIGGGSGGLASARRAAELGARAA
VVESHKLGGTCVNVGCVPKVMWNTAVHSEFMHDHADYGFPSCGKFNWRVKEKRDAYVSRLNAIYQNNLTKS
HIEIRGHAAFTSDPKPTIEVSGKKYTAPHILIATGGMPSTPHESQIPGASLGITSDGFFQLEELPGRSVIVGAGYIAVE
MAGILSALGSKTSLMIRHDKVLRSFDSMISTNCTELENAGVEVLKFSQVKEVKKTLGLEVSMVTAVPGRLPVMTM
IPDVDCLLWAIGRVPNTKDLSLNKLGITDDKGHIIVDEFQNTNVKGIYAVGDVCGKALLTPVAIAAGRKLHRLFEYK
EDSKLDYNNIPTVVFSHPPIGTVGLTEDEAIHKYGIENVKTYSTSFTPMYHAVTKRKTCKVMKMCANKEEKVVGIIH
MQGLGCDEMLQGFAVAVKMGATKADFDNTVAIHPTSSEELVTLR

Purity: > 95% by HPLC

Concentration: 1 mg/ml (determined by Bradford assay)

Endotoxin Level: <1.0 EU per 1 ug of protein (determined by LAL method)

Storage: Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.