

Glutathione Reductase Human Recombinant

Item Number	rAP-1770
Synonyms	Glutathione reductase mitochondrial, GR, GRase, GSR, GLUR, GRD1.
Description	GSR Human Recombinant produced in E.coli is a single, non-glycosylated polypeptide chain containing 504 amino acids (43-522) and having a molecular mass of 54.3kDa. GSR is fused to a 24 amino acid His-tag at N-terminus & purified by proprietary chromatographic techniques.
Uniprot Accession Number	P00390
Amino Acid Sequence	MGSSHHHHH SSGLVPRGSH MGSAMACRQ EPQPQGPPPA AGAVASYDYLVIGGGSGGLA SAR-RAAELGA RAAVVESHKL GGTCVNVGCV PPKVMWNTAV HSEFMHDHAD YGFPSCEGKF NWRVIKEKRD AYSRLNAIY QNNLTKSHIE IIRGHAAFTS DPKPTIEVSG KKYTAPHILI ATGGMPSTPH ESQIPGASLG ITSDGFFQLE ELPGRSVIVG AGYIAVEMAG ILSALGSKTS LMIRHDKVLR SFDSMISTNC TELENAGVE VLKFSQVKEV KKTLSGLEVS MVTAVPGRLP VMTMIPDVDC LLWAIGRVPN TKDLSLNKLG IQTDDKGHII VDEFQNTNVK GIYAVGDVCG KALLTPVAIA AGRKLAHRLF EYKEDSKLDY NNIPTVVFSH PPIGTVGLTE DEAIHKYGIE NVKTYSTSTF PMYHAVTKRK TKCVMMKVCA NKEEKVVGIH MQGLGCDEML QGFVAVKMG ATKADFDNTV AIHPTSSEEL VTLR.
Source	Escherichia Coli.
Physical Appearance and Stability	Sterile Filtered colorless solution. Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer 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.
Formulation and Purity	The GSR solution (1mg/ml) contains 20mM Tris-HCl buffer (pH 8.0), 1mM DTT, 10% glycerol and 0.1M NaCl. Greater than 95.0% as determined by SDS-PAGE.
Application	
Solubility	
Biological Activity	Specific activity: > 29 unit/ml. One unit will reduce 1.0 umol of oxidized glutathione per minute at pH 7.5 at 25°C.
Shipping Format and Condition	Lyophilized powder at room temperature.

Optimal dilutions should be determined by each laboratory for each application. The listed dilutions are for recommendation only and the final conditions should be optimized by the ender users! This product is sold for **Research Use Only**