

# GSR Antibody

*Glutathione Reductase, Mouse Anti Human*  
ABM0289

## Product Overview

Name GSR Antibody

### Description

Glutathione Reductase, Mouse Anti Human

### Synonyms

Glutathione reductase mitochondrial, GR, GRase, GSR, GLUR, GRD1.

### Introduction

Glutathione reductase (GSR) belongs to the class-I pyridine nucleotide-disulfide oxidoreductase family. The GSR enzyme is a homodimeric flavoprotein and has a role in maintaining glutathione (GSH) in its reduced form by catalyzing the reduction of glutathione disulfide (GSSG):  $GSSG + NADPH + H^+ \rightarrow 2GSH + NADP^+$ . In the majority of eukaryotic cells, GSR upholds the ratio of  $[GSH] / [GSSG]$ , and partakes in quite a few critical functions such as the detoxification of reactive oxygen species as well as protein and DNA biosynthesis.

### Source

Escherichia Coli.

### Physical Appearance

Sterile Filtered colorless solution.

### Formulation

The GSR solution (1mg/ml) contains 20mM Tris-HCl buffer (pH 8.0), 1mM DTT, 10% glycerol and 0.1M NaCl.

### Stability

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.

### Purity

Greater than 95.0% as determined by SDS-PAGE.

### Amino acid sequence

MGSSHHHHHH SSGLVPRGSH MGSM AMACRQ EPQPQGPppA AGAVASYDYI VIGGGSGGLA SARRAAELGA  
RAAVVESHKL GGTCVNVGCV PKKVMWNTAV HSEFMHDHAD YGFPSCEGKF NWRVIKEKRD AYVSRLNAIY  
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  
NVKTYSTSFT PMYHAVTKRK TKCVMKMOVCA NKEEKVVGIIH MQGLGCDEML QGFAVAVKMG ATKADFDNTV  
AIHPTSSEEL VTLR.

**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.

**Precautions**

GSR Antibody is for research use only and not for use in diagnostic or therapeutic procedures.