

Rabbit Anti-Glutathione Reductase antibody

SL0837R

Product Name	Glutathione Reductase
Chinese Name	谷胱甘肽还原酶抗体
Alias	glutathione reductase; GLUR; Glutathione reductase mitochondrial; GR; Gr1; GRase; GRD 1; GRD1; GSR; MGC78522; GSHR_HUMAN.
Research Area	immunology Kinases and Phosphatases Mitochondrion
Immunogen Species	Rabbit
Clonality	Polyclonal
React Species	Human,Mouse,Rat(predicted:Dog,Pig,Cow) WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500 (Paraffin sections need antigen repair)
Applications	not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Theoretical molecular weight	57kDa
Cellular localization	Secretory protein Mitochondrion
Form	Liquid
Concentration	1mg/ml
immunogen	KLH conjugated synthetic peptide derived from human Glutathione Reductase: 421-522/522
Lsotype	IgG
Purification	affinity purified by Protein A
Buffer Solution	Human,Mouse,Rat(predicted:Dog,Pig,Cow)1M TBS(pH7.4) with 1% BSA, Human,Mouse,Rat(predicted:Dog,Pig,Cow)3% Proclin300 and 50% Glycerol.
Storage	Shipped at 4°C. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.
Attention	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
PubMed	PubMed

Glutathione reductase (GR) is a member of pyridine nucleotide- disulfideoxidoreductases, which includes the closely related enzymes thioredoxin reductase, lipoamide dehydrogenase, trypanothione reductase and mercuric ion reductase. GR is a cytoplasmic flavoenzyme widely distributed in aerobic organisms. The dimeric protein is composed of two identical subunits, each containing 1 FAD and 1 redox-active disulfide/dithiol as components of the catalytic apparatus. It plays a role in maintaining glutathione (GSH) in its reduced form by catalyzing the reduction of glutathione disulfide (GSSG): $GSSG + NADPH + H^+ \rightarrow 2GSH + NADP^+$. In most eukaryotic cells, GR maintains the ratio of $[GSH]/[GSSG]$, and participates in several vital functions such as the detoxification of reactive oxygen species as well as protein and DNA biosynthesis.

Function:

Maintains high levels of reduced glutathione in the cytosol.

Subunit:

Homodimer; disulfide-linked.

Subcellular Location:

Isoform Mitochondrial: Mitochondrion.

Isoform Cytoplasmic: Cytoplasm.

**Product
Detail**

Similarity:

Belongs to the class-I pyridine nucleotide-disulfide oxidoreductase family.

SWISS:

P00390

Gene ID:

2936

Database links:

[Entrez Gene: 2936](#) Human

[Entrez Gene: 14782](#) Mouse

[Entrez Gene: 116686](#) Rat

[Omim: 138300](#) Human

[SwissProt: P00390](#) Human

[SwissProt: P47791](#) Mouse

[SwissProt: P70619](#) Rat

[Unigene: 271510](#) Human

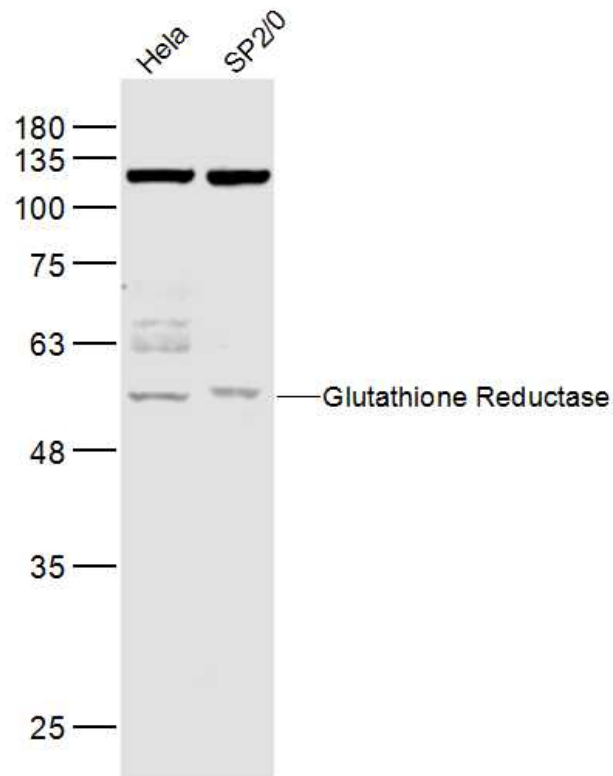
[Unigene: 283573](#) Mouse

[Unigene: 19721](#) Rat

胱甘肽还原酶为一种黄素酶，可催化氧化型谷胱甘肽转变成还原型谷胱甘肽(GSH)，从而提高细胞液中 GSH 的含量。

GSH 具有抵抗自由基氧化对机体损伤的作用，GSH 的重要生理功能在于能还原体内生成的过氧化氢(H₂O₂)。GSH 的储量与创伤、Tumour 等的预后，以及人体衰老有关。

**Product
Picture**



Sample:

A549(Human) Cell Lysate at 30 ug

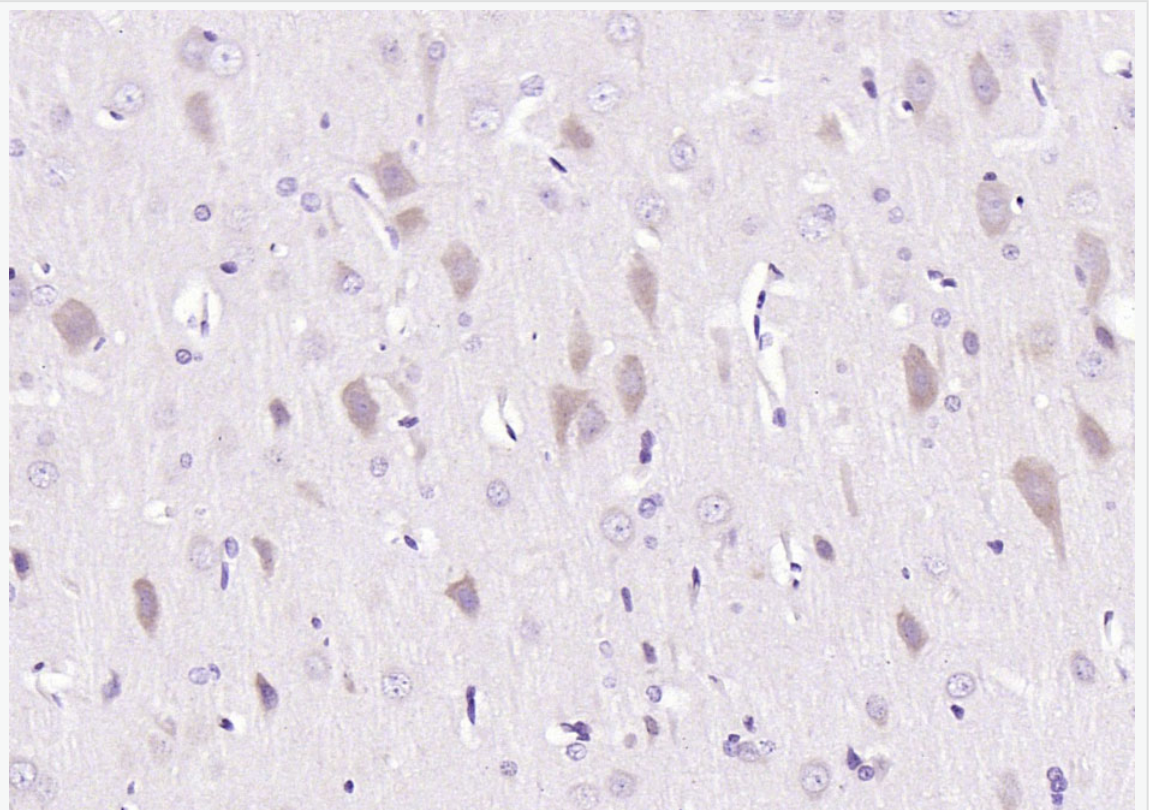
SP2/0(Mouse) Cell Lysate at 30 ug

Primary: Anti-Glutathione Reductase (SL0837R) at 1/300 dilution

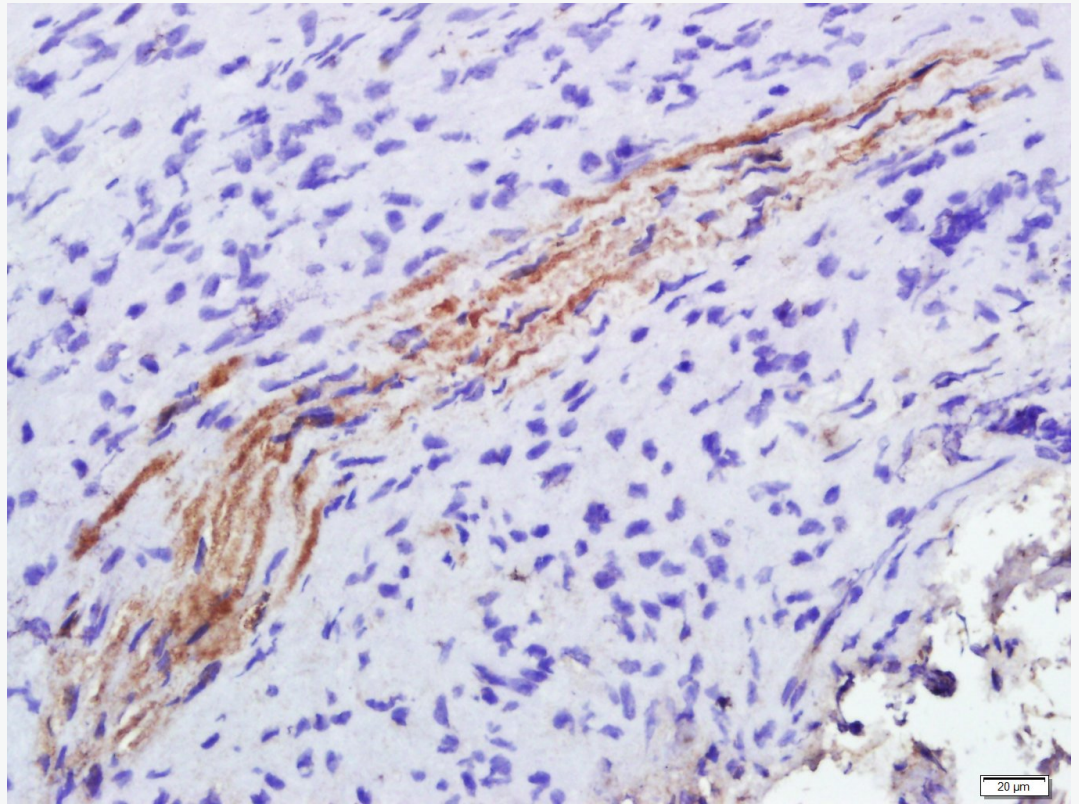
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 57 kD

Observed band size: 57 kD



Paraformaldehyde-fixed, paraffin embedded (rat brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Glutathione Reductase) Polyclonal Antibody, Unconjugated (SL0837R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (Human Pulp); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Glutathione Reductase) Polyclonal Antibody, Unconjugated (SL0837R) at 1:500 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.