



## Rabbit Anti-Glutathione Reductase antibody

SL21564R

<b>Product Name:</b>	Glutathione Reductase
<b>Chinese Name:</b>	谷胱甘肽还原酶抗体
<b>Alias:</b>	glutathione reductase; GLUR; Glutathione reductase mitochondrial; GR; Gr1; GRase; GRD 1; GRD1; GSR; MGC78522; GSHR_HUMAN.
<b>Organism Species:</b>	Rabbit
<b>Clonality:</b>	Polyclonal
<b>React Species:</b>	Mouse,Rat,
<b>Applications:</b>	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
<b>Molecular weight:</b>	57kDa
<b>Cellular localization:</b>	Secretory protein <a href="#">Mitochondrion</a>
<b>Form:</b>	Lyophilized or Liquid
<b>Concentration:</b>	1mg/ml
<b>immunogen:</b>	KLH conjugated synthetic peptide derived from mouse Glutathione Reductase :361-460/500
<b>Lsotype:</b>	IgG
<b>Purification:</b>	affinity purified by Protein A
<b>Storage Buffer:</b>	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
<b>Storage:</b>	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
<b>PubMed:</b>	<a href="#">PubMed</a>
<b>Product Detail:</b>	Glutathione reductase (GR) is a member of pyridine nucleotide-disulfide oxidoreductases, 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.

**Similarity:**

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

**SWISS:**

P47791

**Gene ID:**

14782

**Database links:**

[Entrez Gene: 2936](#)Human

[Entrez Gene: 14782](#)Mouse

[Entrez Gene: 116686](#)Rat

[Ommim: 138300](#)Human

[SwissProt: P00390](#)Human

[SwissProt: P47791](#)Mouse

[SwissProt: P70619](#)Rat

[Unigene: 271510](#)Human

[Unigene: 283573](#)Mouse

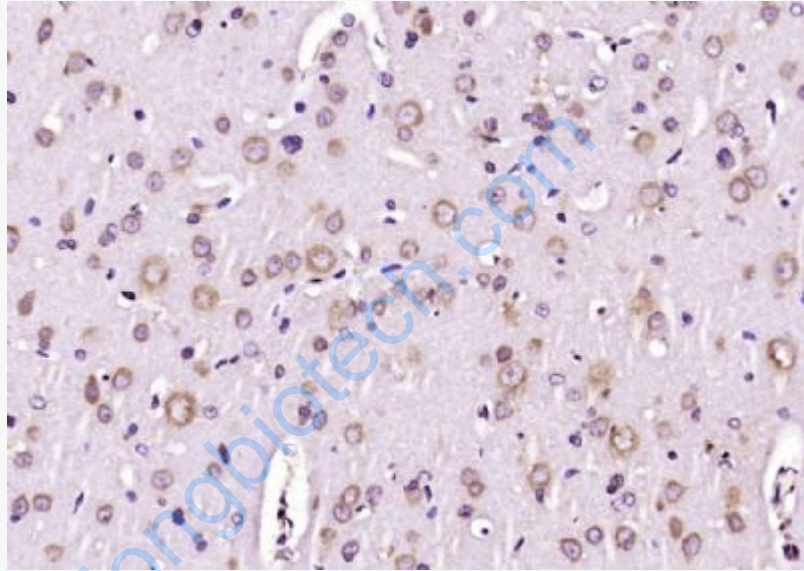
[Unigene: 19721](#)Rat

**Important Note:**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

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(H<sub>2</sub>O<sub>2</sub>)。GSH的储量与创伤、Tumour等的预后, 以及人体衰老有关。



Picture:

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 (SL21564R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.