SunLong Biotech Co.,LTD
Tel: 0086-571- 56623320 Fax:0086-571- 56623318
E-mail:sales@sunlongbiotech.com
www.sunlongbiotech.com

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.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Dog,Pig,Cow,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500（Paraffin sections need antigen repair） not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	57kDa
Cellular localization:	Secretory proteinMitochondrion
Form:	Lyophilized or 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
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	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.
PubMed:	PubMed
Product Detail:	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+?2GSH + NADP+. In mosteukaryotic 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:
P00390

Gene ID:
2936

Database links:

Entrez Gene: 2936Human

Entrez Gene: 14782Mouse

Entrez Gene: 116686Rat

Omim: 138300Human

SwissProt: P00390Human

SwissProt: P47791Mouse

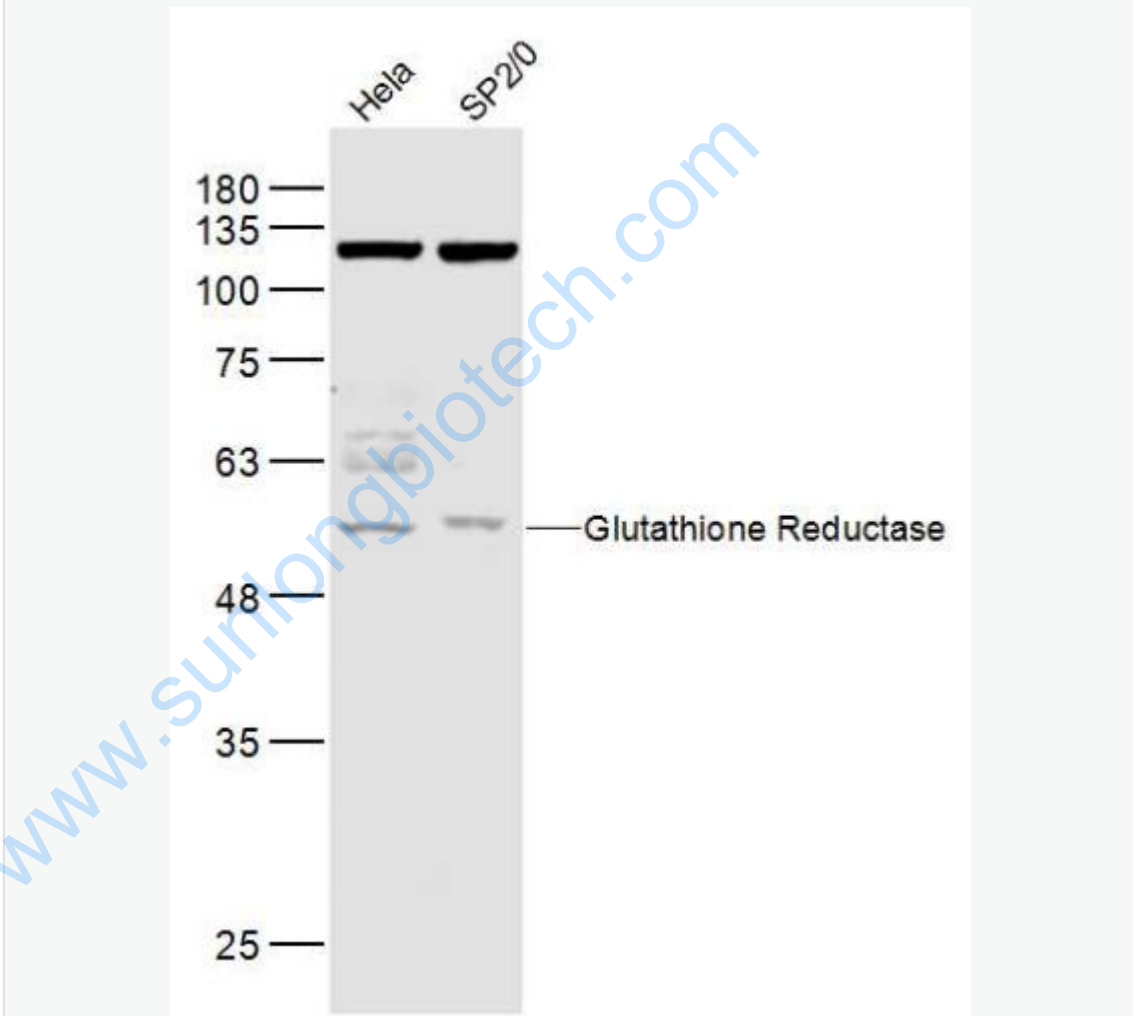
SwissProt: P70619Rat

Unigene: 271510Human

Unigene: 283573Mouse

Unigene: 19721Rat

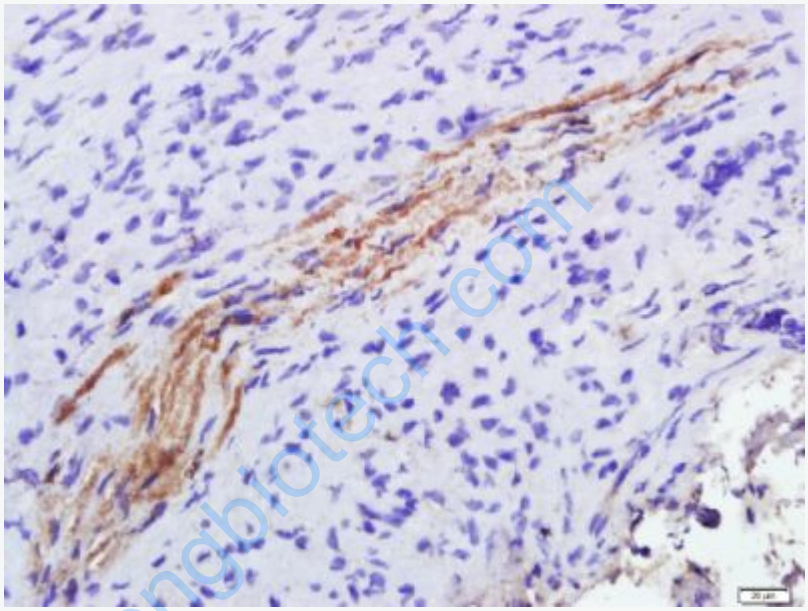
Important Note:

	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(H2O2)。GSH的储量与创伤、Tumour等的预后，以及人体衰老有关。
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 (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.