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Glutathione Reductase Rabbit pAb

Catalog # AP98929

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	P47791
Other Accession	P47791
Reactivity	Rat
Predicted	Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	53663
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from mouse Glutathione Reductase
Epitope Specificity	361-460/500
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the class-I pyridine nucleotide-disulfide oxidoreductase family.
SUBUNIT	Homodimer; disulfide-linked.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	bs-0837P is one synthetic peptide derived from human Glutathione Reductase. 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.

Additional Information

Gene ID	14782
Other Names	CNSHA10; GR; GSRD; HEL-75; HEL-S-122m; D8Ertd238e; Gr-1; Gr1; GSHR_HUMAN; GSR; GRase; 1.8.1.7; GLUR; GRD1; GSHR_MOUSE; GSHR_RAT; glutathione-disulfide reductase; glutathione reductase; glutathione S-reductase
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500

Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. 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.

Protein Information

Name	Gsr
Synonyms	Gr1
Function	Catalyzes the reduction of glutathione disulfide (GSSG) to reduced glutathione (GSH). Constitutes the major mechanism to maintain a high GSH:GSSG ratio in the cytosol.
Cellular Location	[Isoform Mitochondrial]: Mitochondrion {ECO:0000250|UniProtKB:P00390}

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.