10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

GSR Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP12046b

Specification

GSR Antibody (C-term) - Product Information

Application	**FC, IF, IHC-P, WB,E**
Primary Accession	P00390
Other Accession	NP_000628.2
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Antigen Region	**380-408**

GSR Antibody (C-term) - Additional Information

Gene ID 2936

Other Names
Glutathione reductase, mitochondrial, GR, GRase, GSR, GLUR, GRD1

Target/Specificity
This GSR antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 380-408 amino acids from the C-terminal region of human GSR.

Dilution
FC~~1:10~50
IF~~1:10~50
IHC-P~~1:10~50
WB~~1:1000
E~~Use at an assay dependent concentration.

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
GSR Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

GSR Antibody (C-term) - Protein Information

Name GSR

Synonyms GLUR, GRD1

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.

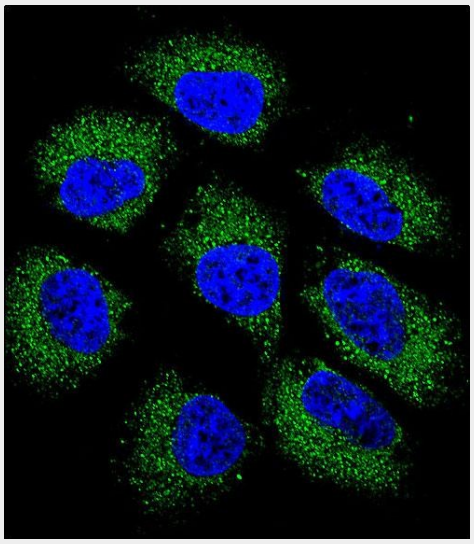
Cellular Location
[Isoform Mitochondrial]: Mitochondrion.

GSR Antibody (C-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

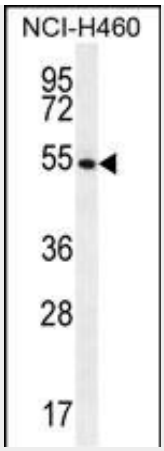
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

GSR Antibody (C-term) - Images

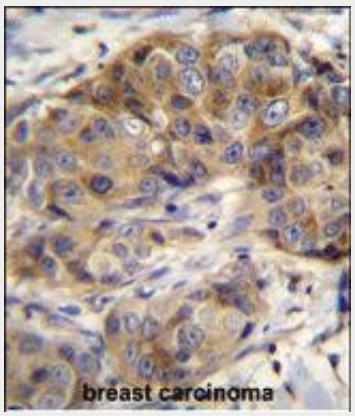


Confocal immunofluorescent analysis of GSR Antibody (C-term)(Cat#AP12046b) with NCI-H460 cell followed by Alexa Fluor 488-conjugated goat anti-rabbit lgG (green). DAPI was used to stain the cell nuclear (blue).

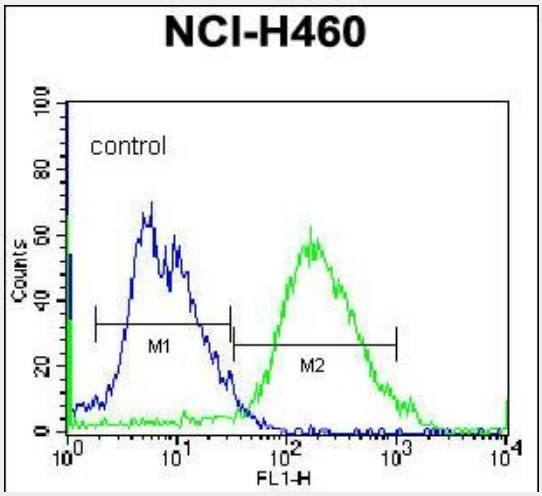
10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999



GSR Antibody (C-term) (Cat. #AP12046b) western blot analysis in NCI-H460 cell line lysates (35ug/lane).This demonstrates the GSR antibody detected the GSR protein (arrow).



GSR Antibody (C-term) (Cat. #AP12046b)immunohistochemistry analysis in formalin fixed and paraffin embedded human breast carcinoma followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of GSR Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.



GSR Antibody (C-term) (Cat. #AP12046b) flow cytometric analysis of NCI-H460 cells (right histogram) compared to a negative control -Rabbit IgG alone (left histogram).FITC-conjugated donkey-anti-rabbit secondary antibodies were used for the analysis.

GSR Antibody (C-term) - Background

10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

This gene encodes a member of the class-I pyridine nucleotide-disulfide oxidoreductase family. This enzyme is a homodimeric flavoprotein. It is a central enzyme of cellular antioxidant defense, and reduces oxidized glutathione disulfide (GSSG) to the sulfhydryl form GSH, which is an important cellular antioxidant. Rare mutations in this gene result in hereditary glutathione reductase deficiency. Multiple alternatively spliced transcript variants encoding different isoforms have been found.

GSR Antibody (C-term) - References

Satoh, N., et al. Biochem. Genet. 48 (9-10), 816-821 (2010) :
Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010)
Wang, Y., et al. J. Hum. Genet. 55(8):490-494(2010)
Rose, J.E., et al. Mol. Med. 16 (7-8), 247-253 (2010) :
Moyer, A.M., et al. Cancer Epidemiol. Biomarkers Prev. 19(3):811-821(2010)