

Datasheet for ABIN5693151

anti-Glutathione Reductase antibody (AA 256-522)[Go to Product page](#)**5** Images

Overview

Quantity:	100 µg
Target:	Glutathione Reductase (GSR)
Binding Specificity:	AA 256-522
Reactivity:	Human, Rat, Mouse
Host:	Rabbit
Clonality:	Polyclonal
Application:	Western Blotting (WB), Immunohistochemistry (IHC), ELISA, Immunocytochemistry (ICC), Flow Cytometry (FACS)

Product Details

Brand:	Picoband™
Immunogen:	E. coli-derived human Glutathione Reductase recombinant protein (Position: K256-R522).
Cross-Reactivity (Details):	No cross reactivity with other proteins.
Characteristics:	Rabbit IgG polyclonal antibody for Glutathione Reductase detection. Tested with WB, IHC-F, ICC, FCM, Direct ELISA in Human, Mouse, Rat.

Target Details

Target:	Glutathione Reductase (GSR)
Alternative Name:	GSR (GSR Products)
Background:	Synonyms: Glutathione reductase, mitochondrial, GR, GRase, GSR, GLUR, GRD1 Background: Glutathione reductase (GR), also known as glutathione-disulfide reductase (GSR),

Target Details

is an enzyme that in humans is encoded by the GSR gene. 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.

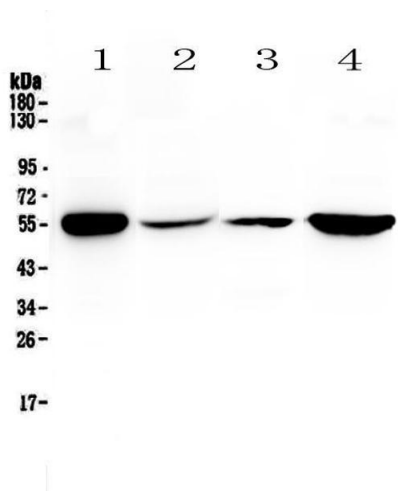
UniProt:	P00390
Pathways:	Thyroid Hormone Synthesis , Cell RedoxHomeostasis

Application Details

Application Notes:	Recommended Detection Systems: Enhanced Chemiluminescent Kit with anti-Rabbit IgG (ABIN921124) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for IHC(F) and ICC.
Restrictions:	For Research Use only

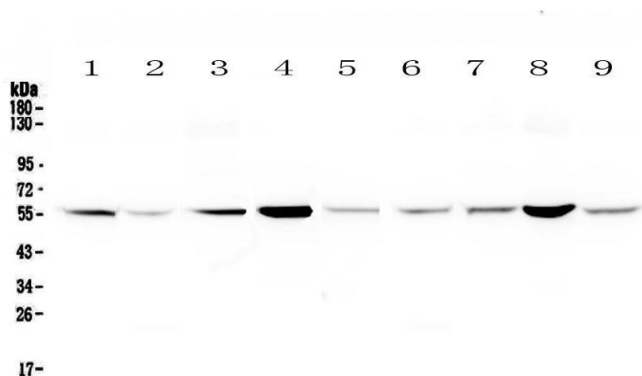
Handling

Format:	Lyophilized
Reconstitution:	Add 0.2 mL of distilled water will yield a concentration of 500 µg/mL.
Buffer:	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na ₂ HPO ₄ , 0.05 mg NaN ₃ .
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C, -20 °C
Storage Comment:	At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.



Western Blotting

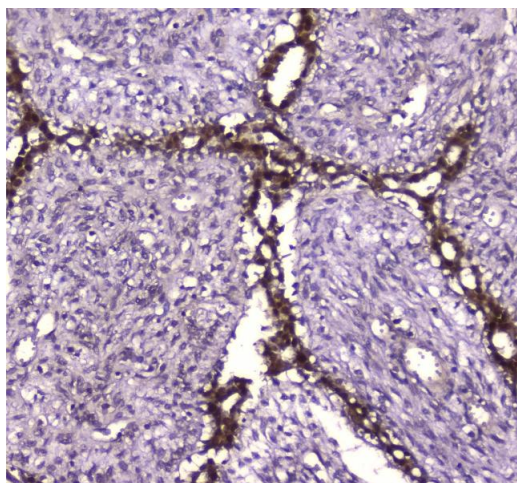
Image 1. Western blot analysis of Glutathione Reductase using anti-Glutathione Reductase antibody . Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each Lane was loaded with 50ug of sample under reducing conditions. Lane 1: human Hela whole cell lysates, Lane 2: human HepG2 whole cell lysates, Lane 3: human A549 whole cell lysates, Lane 4: human 22RV1 whole cell lysates. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-Glutathione Reductase antigen affinity purified polyclonal antibody (Catalog #) at 0.5 µg/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for Glutathione Reductase at approximately 55KD. The expected band size for Glutathione Reductase is at 55KD.



Western Blotting

Image 2. Western blot analysis of Glutathione Reductase using anti-Glutathione Reductase antibody . Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each Lane was loaded with 50ug of sample under reducing conditions. Lane 1: rat spleen tissue lysates, Lane 2: rat lung tissue lysates, Lane 3: rat liver tissue lysates, Lane 4: rat kidney tissue lysates, Lane 5: mouse spleen tissue lysates, Lane 6: mouse lung tissue lysates, Lane 7: mouse liver tissue lysates, Lane 8: mouse kidney tissue lysates, Lane 9:

mouse testis tissue lysates. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-Glutathione Reductase antigen affinity purified polyclonal antibody (Catalog #) at 0.5 µg/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for Glutathione Reductase at approximately 55KD. The expected band size for Glutathione Reductase is at 55KD.



Immunohistochemistry

Image 3. IHC analysis of Glutathione Reductase using anti-Glutathione Reductase antibody . Glutathione Reductase was detected in paraffin-embedded section of human mammary cancer tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1µg/ml rabbit anti-Glutathione Reductase Antibody overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.

Please check the [product details page](#) for more images. Overall 5 images are available for ABIN5693151.