

**KD-Validated Anti-Glutathione synthetase Rabbit Monoclonal Antibody**  
**Rabbit monoclonal antibody**  
**Catalog # AGI2397****Specification****KD-Validated Anti-Glutathione synthetase Rabbit Monoclonal Antibody - Product Information**

Application	WB, FC, ICC
Primary Accession	<a href="#">P48637</a>
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Isotype	Rabbit IgG
Calculated MW	Predicted, 52 kDa; Observed, 48 kDa
Gene Name	GSS
Aliases	GSS; Glutathione Synthetase; Glutathione Synthase; GSH Synthetase; EC 6.3.2.3; GSH-S; HEL-S-64p; HEL-S-88n; GSHS
Immunogen	A synthesized peptide derived from human Glutathione Synthetase

**KD-Validated Anti-Glutathione synthetase Rabbit Monoclonal Antibody - Additional Information**Gene ID **2937****Other Names**

Glutathione synthetase, GSH synthetase, GSH-S, 6.3.2.3, Glutathione synthase, GSS ([http://www.genenames.org/cgi-bin/gene\\_symbol\\_report?hgnc\\_id=4624](http://www.genenames.org/cgi-bin/gene_symbol_report?hgnc_id=4624))  
HGNC:4624

**KD-Validated Anti-Glutathione synthetase Rabbit Monoclonal Antibody - Protein Information**Name GSS ([HGNC:4624](#))**Function**

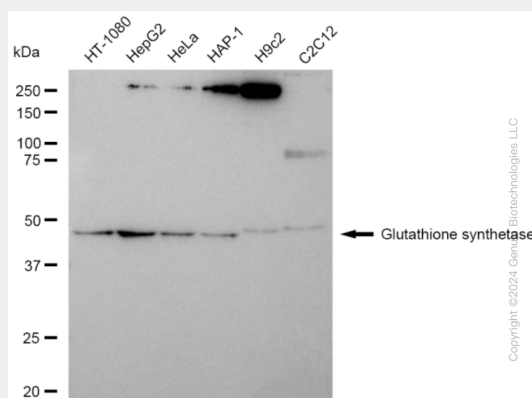
Catalyzes the production of glutathione from gamma- glutamylcysteine and glycine in an ATP-dependent manner (PubMed: [7646467](http://www.uniprot.org/citations/7646467), PubMed: [9215686](http://www.uniprot.org/citations/9215686)). Glutathione (gamma- glutamylcysteinylglycine, GSH) is the most abundant intracellular thiol in living aerobic cells and is required for numerous processes including the protection of cells against oxidative damage, amino acid transport, the detoxification of foreign compounds, the maintenance of protein sulfhydryl groups in a reduced state and acts as a cofactor for a number of enzymes (PubMed: [10369661](http://www.uniprot.org/citations/10369661)). Participates in ophthalmate biosynthesis in hepatocytes (By similarity).

## KD-Validated Anti-Glutathione synthetase Rabbit Monoclonal Antibody - Protocols

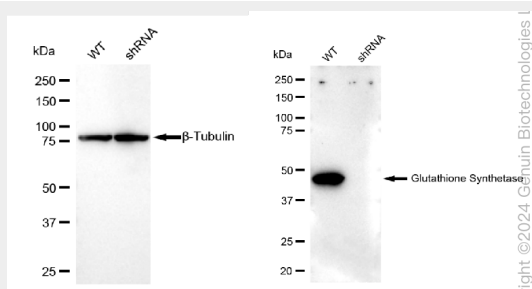
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

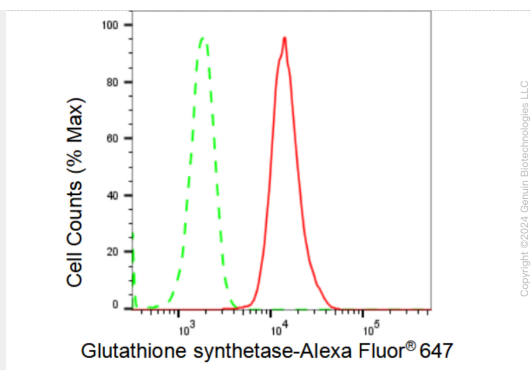
## KD-Validated Anti-Glutathione synthetase Rabbit Monoclonal Antibody - Images



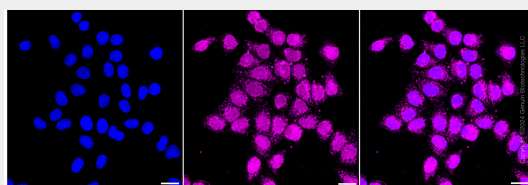
Western blotting analysis using anti-Glutathione synthetase antibody (Cat#AGI2397). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-Glutathione synthetase antibody (Cat#AGI2397, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Western blotting analysis using anti-Glutathione Synthetase antibody (Cat#AGI2397). Glutathione Synthetase expression in wild type (WT) and Glutathione Synthetase shRNA knockdown (KD) HeLa cells with 30 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with anti-Glutathione Synthetase antibody (Cat#AGI2397, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Flow cytometric analysis of Glutathione synthetase expression in HepG2 cells using Glutathione synthetase antibody (Cat#AGI2397, 1:2,000). Green, isotype control; red, Glutathione synthetase.



Immunocytochemical staining of HepG2 cells with Glutathione synthetase antibody (Cat#AGI2397, 1:1,000). Nuclei were stained blue with DAPI; Glutathione synthetase was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar: 20  $\mu$ m.