# [KD Validated] Anti-GSS Rabbit mAb

Purified Recombinant Rabbit Monoclonal Antibody

Catalog # R020239

## Product Information

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| Application | WB, FC, IF (Cell)/ICC |
| Reactivity | Human, Mouse, Rat |
| Dilution | WB 1:1,000~1:5,000; FC 1:200~1:2,000; IF 1:100~1:1,000 |
| Host | Rabbit |
| Clonality | Monoclonal |
| Clone No. | 70S22H89 |
| Isotype | IgG |
| Label | Unconjugated |
| Immunogen | A synthesized peptide derived from human Glutathione Synthetase |
| Format | Affinity purified monoclonal antibody supplied in PBS with 0.02% sodium azide and 50% glycerol, pH 7.3. |
| Storage | Shipped on wet ice. Store at -20°C. Stable for 12 months from date of receipt. Aliquoting is unnecessary for -20°C storage. |
| Precautions | [KD Validated] Anti-GSS Rabbit mAb [70S22H89] is for research use only and not for use in diagnostic or therapeutic procedures. |

## Protein Information

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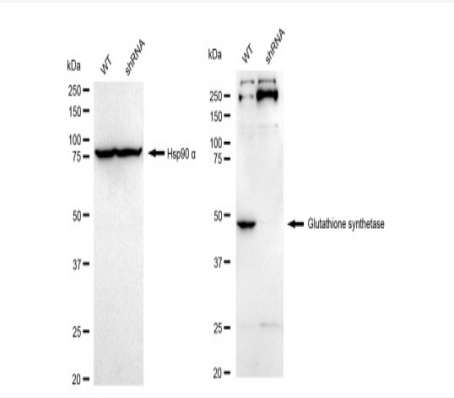
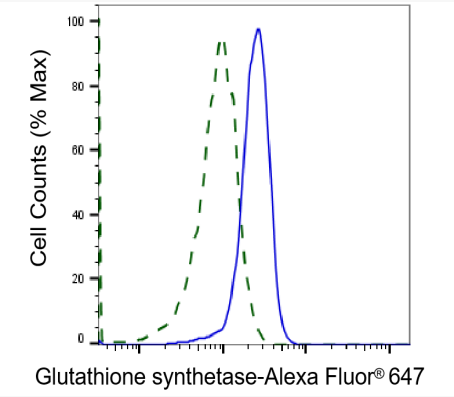
|---|---|
| Synonyms | GSS; Glutathione Synthetase; Glutathione Synthase; GSH Synthetase; EC 6.3.2.3; GSH-S; HEL-S-64p; HEL-S-88n; GSHS. |
| Calculated MW | Calculated MW: 52 kDa, Observed MW: 49 kDa |
| Uniprot ID | P48637 |
| Gene ID | 2937 |
| Background | Glutathione is important for a variety of biological functions, including protection of cells from oxidative damage by free radicals, detoxification of xenobiotics, and membrane transport. The protein encoded by this gene functions as a homodimer to catalyze the second step of glutathione biosynthesis, which is the ATP-dependent conversion of gamma-L-glutamyl-L-cysteine to glutathione. Defects in this gene are a cause of glutathione synthetase deficiency. [provided by RefSeq, Jul 2008] |

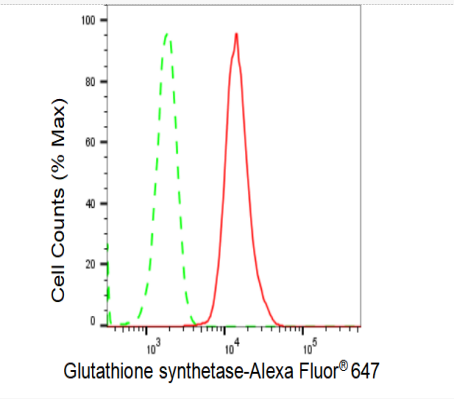
## Validation Images



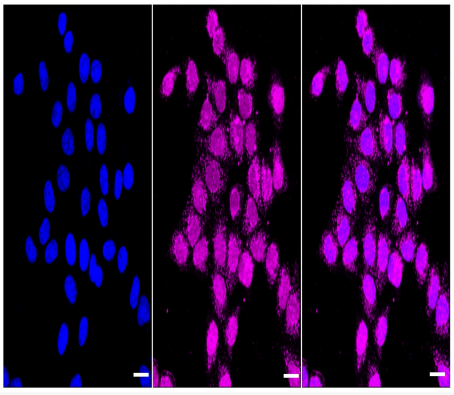

Western blotting analysis using Glutathione Synthetase antibody (R020239). Glutathione Synthetase expression in wild type (WT) and Glutathione Synthetase shRNA knockdown (KD) HeLa cells with 30 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with Glutathione Synthetase antibody (R020239, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (1:20,000) respectively. Image was developed using ECL Substrate Kit.



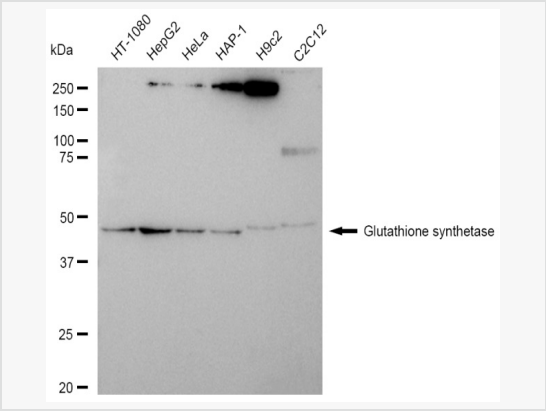

Validation of Glutathione synthetase knockdown using flow cytometry. Wild-type(WT, Blue) and knockdown(KD, Green) HeLa cells were stained with Glutathione synthetase antibody (R020239, 1:2,000) and analyzed using BD flow cytometer.




Flow cytometric analysis of Glutathione synthetase expression in HepG2 cells using Glutathione synthetase antibody (R020239, 1:2,000). Green, isotype control; red, Glutathione synthetase.



Immunocytochemical staining of HepG2 cells with Glutathione synthetase antibody (R020239, 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 µm.




Western blotting analysis using Glutathione synthetase antibody (R020239). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with Glutathione synthetase antibody (R020239, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (1:20,000) respectively. Image was developed using ECL Substrate Kit.