

## Product datasheet for **CF501936**

### Glutathione Synthetase (GSS) Mouse Monoclonal Antibody [Clone ID: OTI2F2]

#### Product data:

Product Type:	Primary Antibodies
Clone Name:	OTI2F2
Applications:	FC, IF, WB
Recommended Dilution:	WB 1:500~2000, IF 1:100, FLOW 1:100
Reactivity:	Human, Dog, Rat, Mouse
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Full length human recombinant protein of human GSS (NP_000169) produced in HEK293T cell.
Formulation:	Lyophilized powder (original buffer 1X PBS, pH 7.3, 8% trehalose)
Reconstitution Method:	For reconstitution, we recommend adding 100uL distilled water to a final antibody concentration of about 1 mg/mL. To use this carrier-free antibody for conjugation experiment, we strongly recommend performing another round of desalting process. (OriGene recommends Zeba Spin Desalting Columns, 7KMWCO from Thermo Scientific)
Purification:	Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography (protein A/G)
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	52.2 kDa
Gene Name:	glutathione synthetase
Database Link:	<a href="#">NP_000169</a> <a href="#">Entrez Gene 14854 Mouse</a> <a href="#">Entrez Gene 25458 Rat</a> <a href="#">Entrez Gene 442962 Dog</a> <a href="#">Entrez Gene 2937 Human</a> <a href="#">P48637</a>



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**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]

**Synonyms:**

GSHS; HEL-S-64p; HEL-S-88n

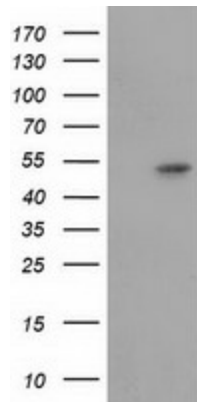
**Protein Families:**

Druggable Genome

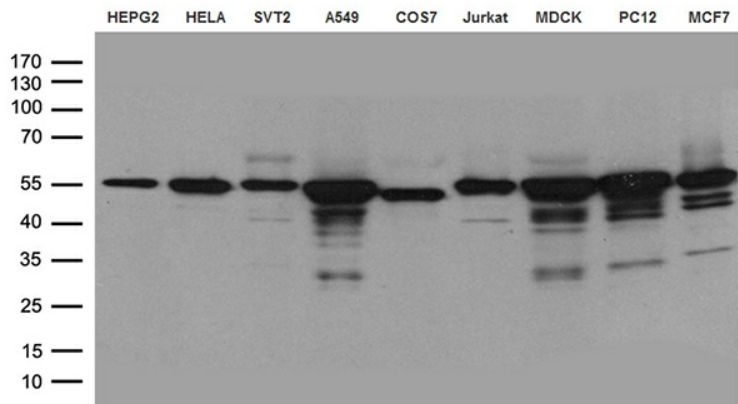
**Protein Pathways:**

Glutathione metabolism, Metabolic pathways

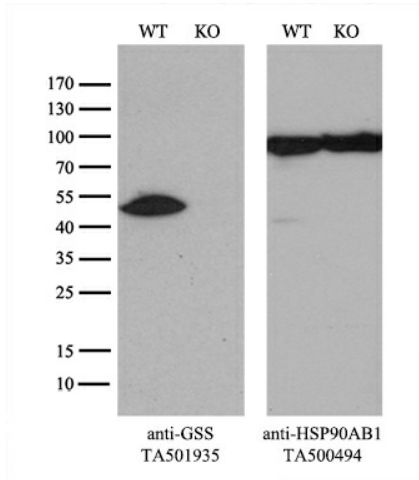
**Product images:**



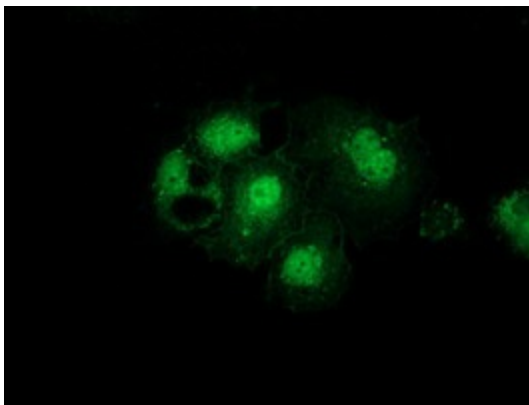
HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY GSS ([RC203174], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-GSS. Positive lysates [LY424876] (100ug) and [LC424876] (20ug) can be purchased separately from OriGene.



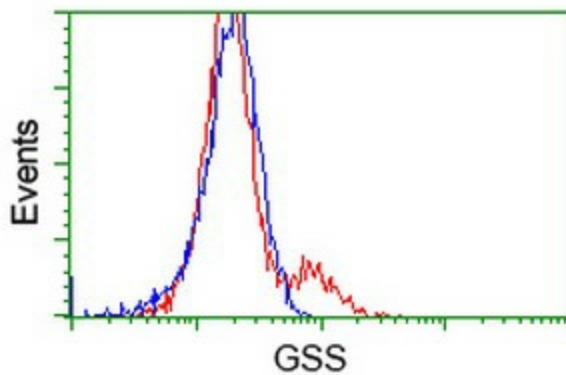
Western blot analysis of extracts (35ug) from 9 different cell lines by using anti-GSS monoclonal antibody (HepG2: human; HeLa: human; SVT2: mouse; A549: human; COS7: monkey; Jurkat: human; MDCK: canine; PC12: rat; MCF7: human) (1:500).



Equivalent amounts of cell lysates (10 ug per lane) of wild-type 293T cells (WT, Cat# LC810293T) and GSS-Knockout 293T cells (KO, Cat# [LC811047]) were separated by SDS-PAGE and immunoblotted with anti-GSS monoclonal antibody [TA501936], (1:500). Then the blotted membrane was stripped and reprobed with anti-HSP90AB1 antibody ([TA500494]) as a loading control.



Anti-GSS mouse monoclonal antibody ([TA501936]) immunofluorescent staining of COS7 cells transiently transfected by pCMV6-ENTRY GSS ([RC203174]).



HEK293T cells transfected with either [RC203174] overexpress plasmid (Red) or empty vector control plasmid (Blue) were immunostained by anti-GSS antibody ([TA501936]), and then analyzed by flow cytometry.