

# **Product datasheet for TA501936S**

#### OriGene Technologies, Inc.

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## 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:** PBS (pH 7.3) containing 1% BSA, 50% glycerol and 0.02% sodium azide.

**Concentration:** 0.7 mg/ml

**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: NP 000169

Entrez Gene 14854 MouseEntrez Gene 25458 RatEntrez Gene 442962 DogEntrez Gene 2937

<u>Human</u> P48637





**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

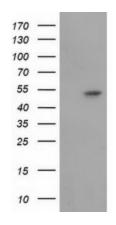
deficiency. [provided by RefSeq]

**Synonyms:** GSHS; HEL-S-64p; HEL-S-88n

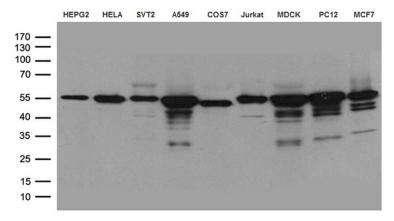
**Protein Families:** Druggable Genome

**Protein Pathways:** Glutathione metabolism, Metabolic pathways

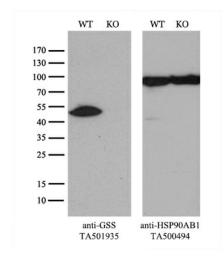
### **Product images:**



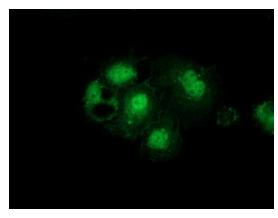
HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY GSS ([RC203174], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-GSS. Positive lysates [LY424876] (100ug) and [LC424876]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



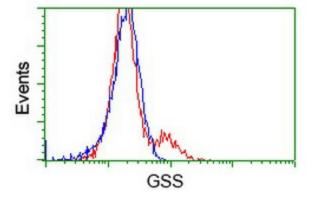
Western blot analysis of extracts (35ug) from 9 different cell lines by using anti-GSS monoclonal antibody (HepG2: human; HeLa: human; SVT2: mouse; A549: human; COS7: monkey; Jurkat: human; MDCK: canine; PC12: rat; MCF7: human) (1:500).



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.