

Human Glutathione Synthetase/GSS antibody

Catalog Number: ATGA0422

PRODUCT INFORMATION

Catalog number

ATGA0422

Clone No.

AT12F2

Product type

Monoclonal Antibody

UnitProt No.

P48637

NCBI Accession No.

NP_000169

Alternative Names

Glutathione synthetase, GSHS, GSH synthetase

PRODUCT SPECIFICATION

Antibody Host

Mouse

Reacts With

Human

Concentration

1mg/ml (determined by BCA assay)

Formulation

Liquid in. Phosphate-Buffered Saline (pH 7.4) with 0.02% Sodium Azide, 10% glycerol

Immunogen

Recombinant human GSS (1-474aa) purified from E. coli

Isotype

IgG1 kappa

Purification Note

By protein-A affinity chromatography

Application

ELISA, WB, ICC/IF

Usage

The antibody has been tested by ELISA, Western blot analysis and ICC/IF to assure specificity and reactivity. Since application varies, however, each investigation should be titrated by the reagent to obtain optimal results.

Storage

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Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

Description

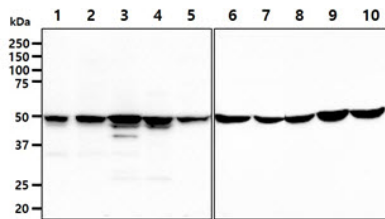
Glutathione synthetase, also known GSS, is the second enzyme in the glutathione biosynthesis pathway. It catalyses the condensation of gamma-glutamylcysteine and glycine, to form glutathione. Defects in GSS are the cause of glutathione synthetase deficiency (GSS deficiency) ; also known as 5-oxoprolinuria or pyroglutamic aciduria. It is a severe form characterized by an increased rate of hemolysis and defective function of the central nervous system.

General References

- Polekhina G., et al. (1999) EMBO J. 18: 3204-3213.
- Huanq Z A., et al. (2000) Biochim Biophys Acta. 1493: 48-55.

DATA

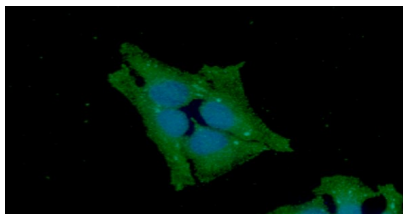
Western blot analysis (WB)



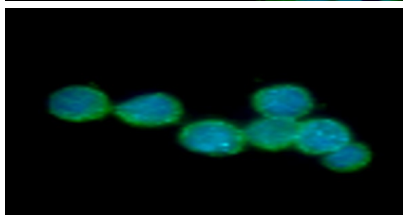
The cell lysates (40ug) were resolved by SDS-PAGE, transferred to PVDF membrane and probed with anti-human GSS antibody (1:1000). Proteins were visualized using a goat anti-mouse secondary antibody conjugated to HRP and an ECL detection system.

- Lane 1.: MDA-MB231 cell lysate
- Lane 2.: WiDr cell lysate
- Lane 3.: SW480 cell lysate
- Lane 4.: A427 cell lysate
- Lane 5.: MCF7 cell lysate
- Lane 6.: 293T cell lysate
- Lane 7.: HeLa cell lysate
- Lane 8.: HT1080 cell lysate
- Lane 9.: U87MG cell lysate
- Lane 10.: A549 cell lysate

Immunocytochemistry/Immunofluorescence (ICC/IF)



ICC/IF analysis of GSS in HeLa cells line, stained with DAPI (Blue) for nucleus staining and monoclonal anti-human GSS antibody (1:100) with goat anti-mouse IgG-Alexa fluor 488 conjugate (Green).



ICC/IF analysis of GSS in Jurkat cells line, stained with DAPI (Blue) for nucleus staining and monoclonal anti-human GSS antibody (1:100) with goat anti-mouse IgG-Alexa fluor 488 conjugate (Green).