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GSS Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP6895b

Product Information

Application	WB, IHC-P, E
Primary Accession	P48637
Other Accession	P46413, P51855, Q8HXX5, Q5EAC2
Reactivity	Human, Rat, Mouse
Predicted	Bovine, Monkey, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	52385
Antigen Region	372-400

Additional Information

Gene ID	2937
Other Names	Glutathione synthetase, GSH synthetase, GSH-S, Glutathione synthase, GSS
Target/Specificity	This GSS antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 372-400 amino acids from the C-terminal region of human GSS.
Dilution	WB~~1:1000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	GSS Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	GSS (HGNC:4624)
Function	Catalyzes the production of glutathione from gamma- glutamylcysteine and glycine in an ATP-dependent manner (PubMed:7646467, PubMed: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). Participates in ophthalmate biosynthesis in hepatocytes (By similarity).

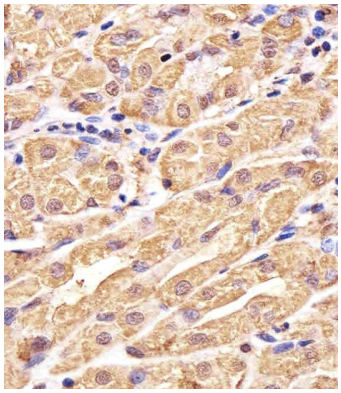
Background

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. GSS 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.

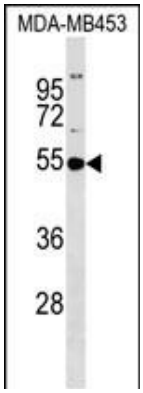
References

Starr,J.M., et.al., Mech. Ageing Dev. 129 (12), 745-751 (2008)

Images



Immunohistochemical analysis of paraffin-embedded H. stomach section using GSS Antibody (C-term)(Cat#AP6895b). AP6895b was diluted at 1:25 dilution. A undiluted biotinylated goat polyvalent antibody was used as the secondary, followed by DAB staining.



GSS Antibody (C-term) (Cat. #AP6895b) western blot analysis in Hela,293T,MDA-MB-453 cell line and mouse liver tissue lysates (35ug/lane).This demonstrates the GSS antibody detected the GSS protein (arrow).

Citations

- Capsular Polysaccharide of Mycoplasma ovipneumoniae Induces Sheep Airway Epithelial Cell Apoptosis via ROS-Dependent JNK/P38 MAPK Pathways.