

Product datasheet for AM31791PU-N

OriGene Technologies, Inc.

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Glutathione S Transferase alpha 1 (GSTA1) Mouse Monoclonal Antibody [Clone ID: 2F7]

Product data:

Product Type: Primary Antibodies

Clone Name: 2F7

Applications: ELISA, IHC, WB

Recommended Dilution: ELISA.

Immunohistochemistry on Paraffin Sections: 5 µg/ml.

Western Blot: 1/500 - 1/1000.

Reactivity: Human
Host: Mouse
Isotype: IgG1

Clonality: Monoclonal

Immunogen: GSTA1 antibody was raised against gSTA1 (AAH53578.1, 1 a.a. ~ 222 a.a) full length

recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.

Specificity: This antibody reacts to GSTA1.

Formulation: PBS, pH 7.2

State: Purified

State: Liquid purified Ig fraction

Concentration: lot specific

Purification: Affinity chromatography on Protein A

Conjugation: Unconjugated

Storage: Store the antibody at -20°C to -80°C.

Avoid repeated freezing and thawing.

Stability: Shelf life: one year from despatch.

Gene Name: glutathione S-transferase alpha 1

Database Link: Entrez Gene 2938 Human

P08263



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Background:

Cytosolic and membrane-bound forms of glutathione S-transferase are encoded by two distinct supergene families. These enzymes function in the detoxification of electrophilic compounds, including carcinogens, therapeutic drugs, environmental toxins and products of oxidative stress, by conjugation with glutathione. The genes encoding these enzymes are known to be highly polymorphic. These genetic variations can change an individual's susceptibility to carcinogens and toxins as well as affect the toxicity and efficacy of some drugs. At present, eight distinct classes of the soluble cytoplasmic mammalian glutathione S-transferases have been identified: alpha, kappa, mu, omega, pi, sigma, theta and zeta. This gene encodes a glutathione S-transferase belonging to the alpha class. The alpha class genes, located in a cluster mapped to chromosome 6, are the most abundantly expressed glutathione S-transferases in liver. In addition to metabolizing bilirubin and certain anticancer drugs in the liver, the alpha class of these enzymes exhibit glutathione peroxidase activity thereby protecting the cells from reactive oxygen species and the products of peroxidation.

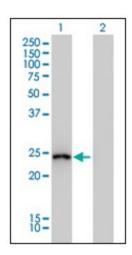
Synonyms: Glutathione S-transferase A1, GSTA1-1, GTH1, GST-epsilon

Protein Families: Druggable Genome

Protein Pathways: Drug metabolism - cytochrome P450, Glutathione metabolism, Metabolism of xenobiotics by

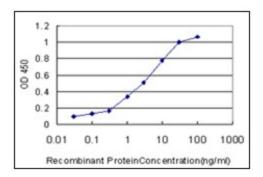
cytochrome P450

Product images:

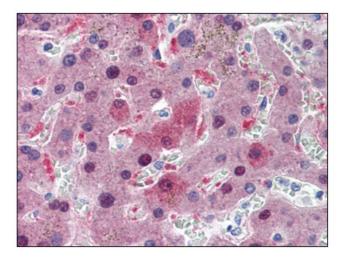


Western Blot analysis of GSTA1 expression in transfected 293T cell line by GSTA1 monoclonal antibody.





Detection limit for recombinant GST tagged GSTA1 is approximately 0.1ng/ml as a capture antibody.



Human Liver: Formalin-Fixed, Paraffin-Embedded (FFPE)