10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

GSTA1 Antibody (ascites)

Mouse Monoclonal Antibody (Mab)
Catalog # AM1932a

Specification

GSTA1 Antibody (ascites) - Product Information

Application	**WB,E**
Primary Accession	P08263
Other Accession	NP_665683.1
Reactivity	**Mouse**
Host	**Mouse**
Clonality	**Monoclonal**
Isotype	**IgM,k**
Calculated MW	**25631**

GSTA1 Antibody (ascites) - Additional Information

Gene ID 2938

Other Names
Glutathione S-transferase A1, GST HA subunit 1, GST class-alpha member 1, GST-epsilon, GSTA1-1, GTH1, Glutathione S-transferase A1, N-terminally processed, GSTA1

Target/Specificity
This GSTA1 monoclonal antibody is generated from mouse immunized with GSTA1 recombinant protein.

Dilution
WB~~1:1000~32000

Format
Mouse monoclonal antibody supplied in crude ascites with 0.09% (W/V) sodium azide.

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
GSTA1 Antibody (ascites) is for research use only and not for use in diagnostic or therapeutic procedures.

GSTA1 Antibody (ascites) - Protein Information

Name GSTA1

Function Glutathione S-transferase that catalyzes the nucleophilic attack of the sulfur atom of glutathione on the electrophilic groups of a wide range of exogenous and endogenous compounds (Probable). Involved in the formation of glutathione conjugates of both prostaglandin A2 (PGA2)

and prostaglandin J2 (PGJ2) (PubMed:9084911). It also catalyzes the isomerization of D5-androstene-3,17-dione (AD) into D4-androstene- 3,17-dione and may therefore play an important role in hormone biosynthesis (PubMed:11152686). Through its glutathione-dependent peroxidase activity toward the fatty acid hydroperoxide (13S)-hydroperoxy-(9Z,11E)-octadecadienoate/13-HPODE it is also involved in the metabolism of oxidized linoleic acid (PubMed:16624487).

Cellular Location
Cytoplasm.

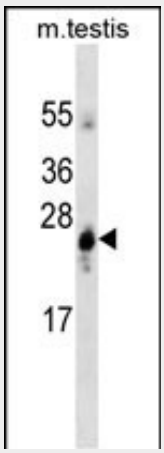
Tissue Location
Liver.

GSTA1 Antibody (ascites) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

GSTA1 Antibody (ascites) - Images



GSTA1 (Cat. #AM1932a) western blot analysis in mouse testis tissue lysates (35µg/lane).This demonstrates the GSTA1 antibody detected the GSTA1 protein (arrow).

GSTA1 Antibody (ascites) - 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-tranferase 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 anti-cancer 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.

GSTA1 Antibody (ascites) - References

Elhasid, R., et al. Pediatr Blood Cancer 55(6):1172-1179(2010) Hawken, S.J., et al. Hum. Genet. 128(1):89-101(2010) Oguztuzun, S., et al. Folia Histochem. Cytobiol. 48(1):122-127(2010) Eriksen, K.T., et al. J. Toxicol. Environ. Health Part A 73(9):583-595(2010) Nguyen, T.V., et al. Oncol. Res. 18(7):349-355(2010)