

Catalog # AM2078a

GSTM1 Antibody (Ascites) Mouse Monoclonal Antibody (Mab)

Specification

GSTM1 Antibody (Ascites) - Product Information

Application	WB,E
Primary Accession	<u>P09488</u>
Other Accession	<u>NP_000552.2</u>
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgM
Calculated MW	25712
Antigen Region	184-211

GSTM1 Antibody (Ascites) - Additional Information

Gene ID 2944

Other Names Glutathione S-transferase Mu 1, GST HB subunit 4, GST class-mu 1, GSTM1-1, GSTM1a-1a, GSTM1b-1b, GTH4, GSTM1, GST1

Target/Specificity

This GSTM1 antibody is generated from mice immunized with a KLH conjugated synthetic peptide between 184-211 amino acids from human GSTM1.

Dilution WB~~1:500~2000 E~~Use at an assay dependent concentration.

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

GSTM1 Antibody (Ascites) is for research use only and not for use in diagnostic or therapeutic procedures.

GSTM1 Antibody (Ascites) - Protein Information

Name GSTM1 (<u>HGNC:4632</u>)

Synonyms GST1



Function Conjugation of reduced glutathione to a wide number of exogenous and endogenous hydrophobic electrophiles. Involved in the formation of glutathione conjugates of both prostaglandin A2 (PGA2) and prostaglandin J2 (PGJ2) (PubMed:<u>9084911</u>). Participates in the formation of novel hepoxilin regioisomers (PubMed:<u>21046276</u>).

Cellular Location Cytoplasm.

Tissue Location Liver (at protein level).

GSTM1 Antibody (Ascites) - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

GSTM1 Antibody (Ascites) - Images



GSTM1 Antibody (Cat. #AM2078a) western blot analysis in MDA-MB231 cell line lysates (35µg/lane).This demonstrates the GSTM1 antibody detected the GSTM1 protein (arrow).

GSTM1 Antibody (Ascites) - Background

Cytosolic and membrane-bound forms of glutathione S-transferase are encoded by two distinct supergene families. 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 that belongs to the mu class. The mu class of enzymes functions in the detoxification of electrophilic compounds, including carcinogens, therapeutic drugs, environmental toxins and products of oxidative stress, by conjugation with



glutathione. The genes encoding the mu class of enzymes are organized in a gene cluster on chromosome 1p13.3 and 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 certain drugs. Null mutations of this class mu gene have been linked with an increase in a number of cancers, likely due to an increased susceptibility to environmental toxins and carcinogens. Multiple protein isoforms are encoded by transcript variants of this gene.

GSTM1 Antibody (Ascites) - References

Palli, D., et al. Mutagenesis 25(6):569-575(2010) Henderson, A.J., et al. Thorax 65(10):897-902(2010) Filonzi, L., et al. Birth Defects Res. Part A Clin. Mol. Teratol. 88(9):743-747(2010) Smith, G., et al. Pharmacogenet. Genomics (2010) In press : Wang, T., et al. J. Int. Med. Res. 38(3):977-986(2010)