GSTM1 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP6896b

Product Information

Application	IHC-P, FC, WB, E
Primary Accession	P09488
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB21078
Calculated MW	25712
Antigen Region	184-211

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 rabbits immunized with a KLH conjugated synthetic peptide between 184-211 amino acids from the C-terminal region of human GSTM1.
Dilution	IHC-P~~1:100~500 FC~~1:10~50 WB~~1:1000 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	GSTM1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	GSTM1 (HGNC:4632)
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:9084911). Participates in the formation of novel hepoxilin regioisomers (PubMed:21046276).

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Cellular Location	Cytoplasm.
Tissue Location	Liver (at protein level).

Background

GSTM1 is 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 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.
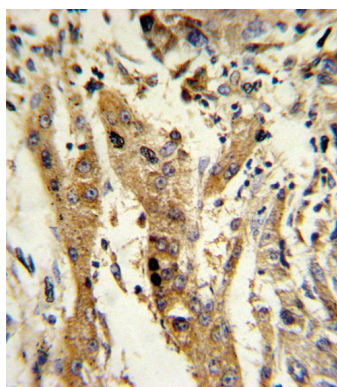
References

Kostrykina,N.A., et.al., Bull. Exp. Biol. Med. 148 (1), 89-93 (2009)

Images
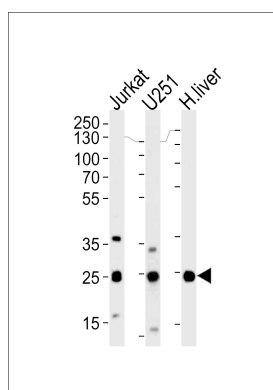
Western blot analysis of lysates from Jurkat, U251 cell line and human liver tissue (from left to right), using GSTM1 Antibody (C-term) (Cat. #AP6896b). AP6896b was diluted at 1:1000 at each lane. A goat anti-rabbit (HRP) at 1:5000 dilution was used as the secondary antibody. Lysates at 35ug per lane.

Formalin-fixed and paraffin-embedded human hepatocarcinoma reacted with GSTM1 Antibody (C-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

GSTM1 Antibody (C-term) (Cat. #AP6896b) flow cytometric analysis of MDA-MB231 cells (bottom histogram) compared to a negative control cell (top histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.
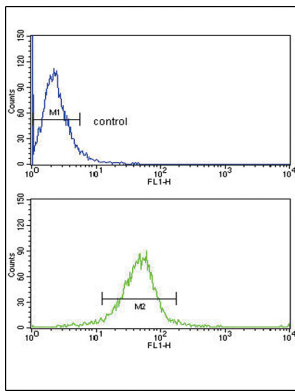
Citations

- Interaction of Hepatitis B Virus X Protein with the Pregnane X Receptor Enhances the Synergistic Effects of Aflatoxin B1 and Hepatitis B Virus on Promoting Hepatocarcinogenesis

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.