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GSTM5 Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a partial recombinant GSTM5.
Catalog # AT2280a

Product Information

Application	E
Primary Accession	P46439
Other Accession	NM_000851
Reactivity	Human
Host	mouse
Clonality	monoclonal
Isotype	IgG2a Kappa
Clone Names	1B3
Calculated MW	25675

Additional Information

Gene ID	2949
Other Names	Glutathione S-transferase Mu 5, GST class-mu 5, GSTM5-5, GSTM5
Target/Specificity	GSTM5 (NP_000842, 145 a.a. ~ 218 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Dilution	E~~N/A
Format	Clear, colorless solution in phosphate buffered saline, pH 7.2 .
Storage	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.
Precautions	GSTM5 Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

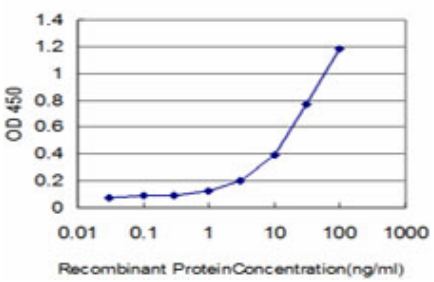
Background

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. Diversification of these genes has occurred in regions encoding substrate-binding domains, as well as in tissue expression patterns, to accommodate an increasing number of foreign compounds.

References

Common polymorphisms in ITGA2, PON1 and THBS2 are associated with coronary atherosclerosis in a candidate gene association study of the Chinese Han population. Wang Y, et al. J Hum Genet, 2010 Aug. PMID 20485444.New genetic associations detected in a host response study to hepatitis B vaccine. Davila S, et al. Genes Immun, 2010 Apr. PMID 20237496.Glutathione pathway genetic polymorphisms and lung cancer survival after platinum-based chemotherapy. Moyer AM, et al. Cancer Epidemiol Biomarkers Prev, 2010 Mar. PMID 20200426.Genetic variants in GSTM3 gene within GSTM4-GSTM2-GSTM1-GSTM5-GSTM3 cluster influence breast cancer susceptibility depending on GSTM1. Yu KD, et al. Breast Cancer Res Treat, 2010 Jun. PMID 19856098.Association study between single-nucleotide polymorphisms in 199 drug-related genes and commonly measured quantitative traits of 752 healthy Japanese subjects. Saito A, et al. J Hum Genet, 2009 Jun. PMID 19343046.

Images



Detection limit for recombinant GST tagged GSTM5 is approximately 1ng/ml as a capture antibody.

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