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GSTM4 Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a partial recombinant GSTM4.
Catalog # AT2279a

Product Information

Application	WB
Primary Accession	Q03013
Other Accession	BC015513
Reactivity	Human
Host	mouse
Clonality	monoclonal
Isotype	IgG2a Kappa
Clone Names	4B4
Calculated MW	25561

Additional Information

Gene ID	2948
Other Names	Glutathione S-transferase Mu 4, GST class-mu 4, GST-Mu2, GSTM4-4, GSTM4
Target/Specificity	GSTM4 (AAH15513.1, 23 a.a. ~ 119 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Dilution	WB~~1:500~1000
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	GSTM4 Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

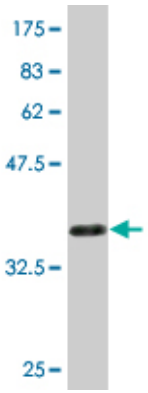
Background

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. Multiple transcript variants, each encoding a distinct protein isoform, have been identified.

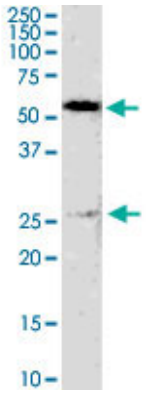
References

Variation at the NFATC2 Locus Increases the Risk of Thiazolinedinedione-Induced Edema in the Diabetes REduction Assessment with ramipril and rosiglitazone Medication (DREAM) Study. Bailey SD, et al. Diabetes Care, 2010 Jul 13. PMID 20628086.The expression of GST isoenzymes and p53 in non-small cell lung cancer. Oguzt?zun S, et al. Folia Histochem Cytobiol, 2010 Jan 1. PMID 20529827.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.

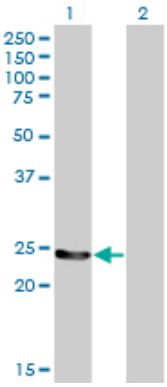
Images



Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (36.41 KDa) .



GSTM4 monoclonal antibody (M01), clone 4B4. Western Blot analysis of GSTM4 expression in HeLa.



Western Blot analysis of GSTM4 expression in transfected 293T cell line by GSTM4 monoclonal antibody (M01), clone 4B4.

Lane 1: GSTM4 transfected lysate(25.6 KDa).
Lane 2: Non-transfected lysate.