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GSTA1 Antibody (monoclonal) (M08)

Mouse monoclonal antibody raised against a full-length recombinant GSTA1.
Catalog # AT2276a

Product Information

Application	WB, E
Primary Accession	P08263
Other Accession	BC053578.1
Reactivity	Human
Host	mouse
Clonality	monoclonal
Isotype	IgG1 kappa
Clone Names	1F9
Calculated MW	25631

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	GSTA1 (AAH53578.1, 1 a.a. ~ 222 a.a) full-length recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Dilution	WB~~1:500~1000 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	GSTA1 Antibody (monoclonal) (M08) is for research use only and not for use in diagnostic or therapeutic procedures.

Background

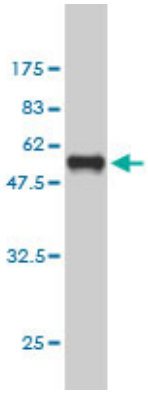
Cytosolic and membrane-bound forms of glutathione S-transferase are encoded by two distinct supergene families. These enzymes function in the detoxification of electrophilic compounds, including carcinogens, therapeutic drugs, environmental toxins and products of oxidative stress, by conjugation with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

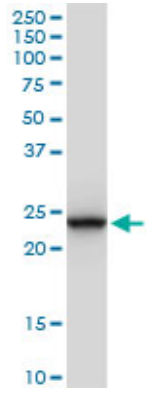
References

Influence of glutathione S-transferase A1, P1, M1, T1 polymorphisms on oral busulfan pharmacokinetics in children with congenital hemoglobinopathies undergoing hematopoietic stem cell transplantation. Elhasid R, et al. Pediatr Blood Cancer, 2010 Jul 29. PMID 20672371.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.The utility and predictive value of combinations of low penetrance genes for screening and risk prediction of colorectal cancer. Hawken SJ, et al. Hum Genet, 2010 Jul. PMID 20437058.Lifestyle, environmental, and genetic predictors of bulky DNA adducts in a study population nested within a prospective Danish cohort. Eriksen KT, et al. J Toxicol Environ Health A, 2010 Jan. PMID 20391138.Genetic polymorphisms in GSTA1, GSTP1, GSTT1, and GSTM1 and gastric cancer risk in a Vietnamese population. Nguyen TV, et al. Oncol Res, 2010. PMID 20377137.

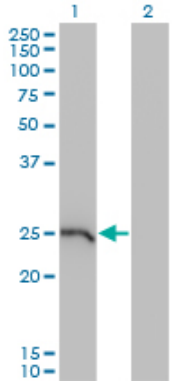
Images



Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (50.16 KDa) .

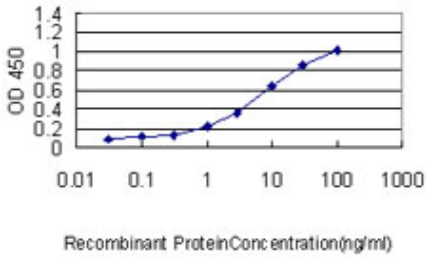


GSTA1 monoclonal antibody (M08), clone 1F9. Western Blot analysis of GSTA1 expression in human liver.



Western Blot analysis of GSTA1 expression in transfected 293T cell line by GSTA1 monoclonal antibody (M08), clone 1F9.

Lane 1: GSTA1 transfected lysate(26 KDa).
Lane 2: Non-transfected lysate.



Detection limit for recombinant GST tagged GSTA1 is approximately 0.1ng/ml as a capture antibody.

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