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GSTA3 Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a full length recombinant GSTA3.
Catalog # AT2277a

Product Information

Application	WB, IHC, E
Primary Accession	Q16772
Other Accession	BC020619
Reactivity	Human
Host	mouse
Clonality	monoclonal
Isotype	IgG2a Kappa
Clone Names	1F11
Calculated MW	25302

Additional Information

Gene ID	2940
Other Names	Glutathione S-transferase A3, GST class-alpha member 3, Glutathione S-transferase A3-3, GSTA3
Target/Specificity	GSTA3 (AAH20619, 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 IHC~~1:100~500 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	GSTA3 Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

Background

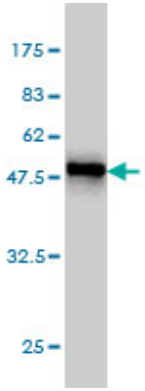
Cytosolic and membrane-bound forms of glutathione S-transferase are encoded by two distinct supergene families. These enzymes are involved in cellular defense against toxic, carcinogenic, and pharmacologically active electrophilic compounds. At present, eight distinct classes of the soluble cytoplasmic 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 genes that are located in a cluster mapped to chromosome 6. Genes of the alpha class are highly related and encode enzymes with glutathione peroxidase activity. However, during evolution, this alpha class gene diverged accumulating mutations in the active site that resulted in differences in substrate specificity and catalytic activity. The enzyme encoded by this gene catalyzes the double bond isomerization of precursors for progesterone and testosterone during the biosynthesis of steroid hormones. An additional transcript variant has been identified, but its full length

sequence has not been determined.

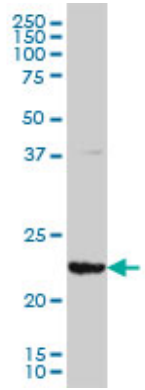
References

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.Structural basis for featuring of steroid isomerase activity in alpha class glutathione transferases. Tars K, et al. J Mol Biol, 2010 Mar 19. PMID 20083122.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.Oxidative stress, telomere length and biomarkers of physical aging in a cohort aged 79 years from the 1932 Scottish Mental Survey. Starr JM, et al. Mech Ageing Dev, 2008 Dec. PMID 18977241.

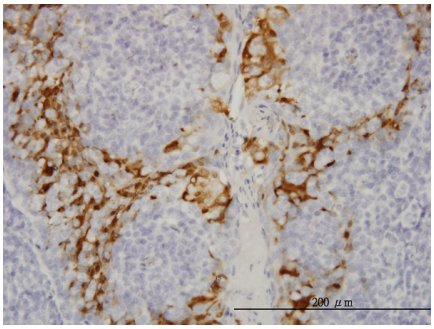
Images



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

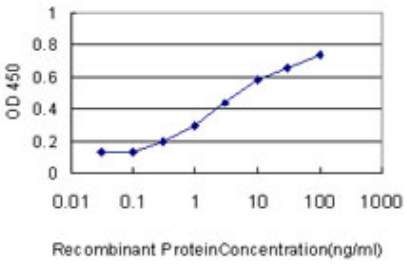


GSTA3 monoclonal antibody (M01), clone 1F11 Western Blot analysis of GSTA3 expression in HepG2 ((Cat # AT2277a)



Immunoperoxidase of monoclonal antibody to GSTA3 on formalin-fixed paraffin-embedded human tonsil. [antibody concentration 3 ug/ml]

Detection limit for recombinant GST tagged GSTA3 is approximately 0.3ng/ml as a capture antibody.



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