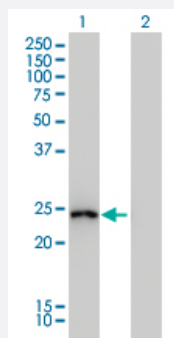


GSTA1 monoclonal antibody (M01), clone 2F7

Catalog # H00002938-M01

Size 100 ug

Applications

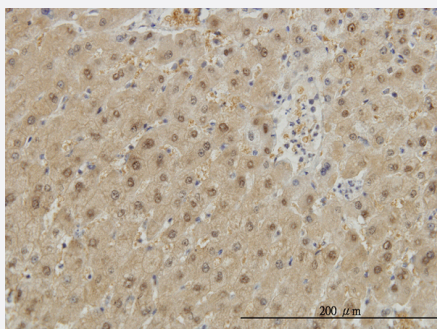


Western Blot (Transfected lysate)

Western Blot analysis of GSTA1 expression in transfected 293T cell line by GSTA1 monoclonal antibody (M01), clone 2F7.

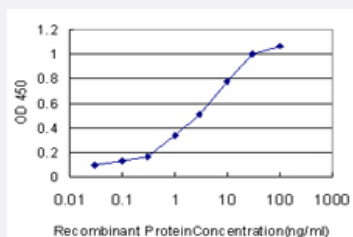
Lane 1: GSTA1 transfected lysate(26 KDa).

Lane 2: Non-transfected lysate.



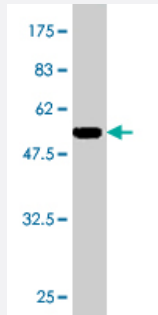
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunoperoxidase of monoclonal antibody to GSTA1 on formalin-fixed paraffin-embedded human liver. [antibody concentration 3 ug/ml]



Sandwich ELISA (Recombinant protein)

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



Western Blot detection against Immunogen (50.16 KDa) .

Specification

Product Description	Mouse monoclonal antibody raised against a full length recombinant GSTA1.
Immunogen	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.
Sequence	MAEKPKLHYFNARGRMESTRWLLAAAGVEFEEKFIKSAEDLDKLRNDGYLMFQQVPMVEIDGMK LVQTRAILNYASKYNLYGKDIKERALIDMYEGIADLGEMILLPVCPPEEKDAKLALIKEKIKNRYFPA FEKVLKSHGQDYL VGNKLSRADIHLVELLYVEELDSSLISFPLLKALKTRISNLPVKKFLQPGS PRKPPMDEKSLEEARKIFRF
Host	Mouse
Reactivity	Human
Interspecies Antigen Sequence	Rat (76)
Isotype	IgG1 Kappa
Quality Control Testing	Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (50.16 KDa) .
Storage Buffer	In 1x PBS, pH 7.4
Storage Instruction	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

Applications

- Western Blot (Transfected lysate)

Western Blot analysis of GSTA1 expression in transfected 293T cell line by GSTA1 monoclonal antibody (M01), clone 2F7.

Lane 1: GSTA1 transfected lysate(26 KDa).

Lane 2: Non-transfected lysate.

[Protocol Download](#)

- Western Blot (Recombinant protein)

[Protocol Download](#)

- Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunoperoxidase of monoclonal antibody to GSTA1 on formalin-fixed paraffin-embedded human liver. [antibody concentration 3 ug/ml]

[Protocol Download](#)

- Sandwich ELISA (Recombinant protein)

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

[Protocol Download](#)

- ELISA

Gene Info — GSTA1

Entrez GeneID	2938
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GeneBank Accession#	BC053578.1
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Protein Accession#	AAH53578.1
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Gene Name	GSTA1
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Gene Alias	GST2, GSTA1-1, GTH1, MGC131939
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Gene Description	glutathione S-transferase alpha 1
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Omim ID	138359
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Gene Ontology	Hyperlink
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Gene Summary

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-transferase 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. [provided by RefSeq]

Other Designations

GST, class alpha, 1|GST-epsilon|OTTHUMP00000016611|S-(hydroxyalkyl)glutathione lyase A1|glutathione S-alkyltransferase A1|glutathione S-aryltransferase A1|glutathione S-transferase 2|glutathione S-transferase A1|glutathione S-transferase Ha subunit 1

Publication Reference

- [Redox Protein Expression Predicts Radiotherapeutic Response in Early-Stage Invasive Breast Cancer Patients.](#)

Woolston CM, Al-Attar A, Storr SJ, Ellis IO, Morgan DA, Martin SG.

International Journal of Radiation Oncology, Biology, Physics 2011 Apr; 79(5):1532.

Application: IHC-P, Human, Tissue microarray

- [Overcoming glutathione S-transferase P1-related cisplatin resistance in osteosarcoma.](#)

Pasello M, Michelacci F, Scionti I, Hattinger CM, Zuntini M, Caccuri AM, Scotlandi K, Picci P, Serra M.

Cancer Research 2008 Aug; 68(16):6661.

Pathway

- [Drug metabolism - cytochrome P450](#)
- [Glutathione metabolism](#)
- [Metabolism of xenobiotics by cytochrome P450](#)

Disease

- [Acute Disease](#)

- [Adenoma](#)
- [Adenomatous Polyposis Coli](#)
- [Alzheimer disease](#)
- [Amphetamine-Related Disorders](#)
- [Arsenic Poisoning](#)
- [Asthma](#)
- [Breast cancer](#)
- [Breast Neoplasms](#)
- [Carcinoma](#)
- [Chromosome Aberrations](#)
- [Chromosome Deletion](#)
- [Cognition](#)
- [Colon cancer](#)
- [Colorectal Neoplasms](#)
- [Diabetes Mellitus](#)
- [DNA Damage](#)
- [Drug Toxicity](#)
- [Duodenal Neoplasms](#)
- [Genetic Predisposition to Disease](#)
- [Graft vs Host Disease](#)
- [Hemoglobinopathies](#)
- [Hepatic Veno-Occlusive Disease](#)
- [Hypertension](#)
- [Kidney Failure](#)
- [Leukemia](#)
- [Liver Diseases](#)

- [Liver Neoplasms](#)
- [Lung carcinoma](#)
- [Lung Neoplasms](#)
- [Mouth Neoplasms](#)
- [Myelodysplastic Syndromes](#)
- [Neoplasm Invasiveness](#)
- [Neoplasm Metastasis](#)
- [Neoplasms](#)
- [Neutropenia](#)
- [Ovarian cancer](#)
- [Ovarian Failure](#)
- [Ovarian Neoplasms](#)
- [Prostate cancer](#)
- [Prostatic Neoplasms](#)
- [Pulmonary Disease](#)
- [Recurrence](#)
- [Stomach Neoplasms](#)
- [Translocation](#)
- [Urinary Bladder Neoplasms](#)
- [Urologic Neoplasms](#)