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GSTA2 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP9413a

Product Information

Application	WB, IHC-P, E
Primary Accession	P09210
Other Accession	P08263, Q16772, Q7RTV2
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB24006
Calculated MW	25664
Antigen Region	1-30

Additional Information

Gene ID	2939
Other Names	Glutathione S-transferase A2, GST HA subunit 2, GST class-alpha member 2, GST-gamma, GSTA2-2, GTH2, GSTA2, GST2
Target/Specificity	This GSTA2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from the N-terminal region of human GSTA2.
Dilution	WB~~1:1000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	GSTA2 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	GSTA2
Synonyms	GST2
Function	Catalyzes the conjugation of glutathione to a large variety of electrophilic

compounds.

Cellular Location Cytoplasm.

Tissue Location Liver..

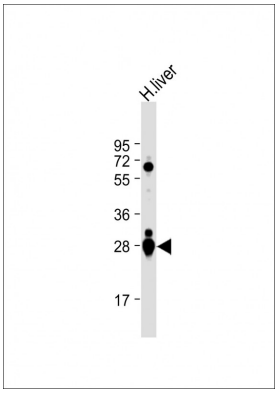
Background

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.

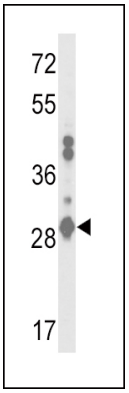
References

Tars, K., et al. J. Mol. Biol. 397(1):332-340(2010) Moyer, A.M., et al. Cancer Epidemiol. Biomarkers Prev. 19(3):811-821(2010) Gemignani, F., et al. Mutat. Res. 671 (1-2), 76-83 (2009) Rohrdanz, E., et al. Arch. Biochem. Biophys. 298(2):747-752(1992) Bogaards, J.J., et al. Biochem. J. 286 (PT 2), 383-388 (1992) Klone, A., et al. Biochem. J. 285 (PT 3), 925-928 (1992)

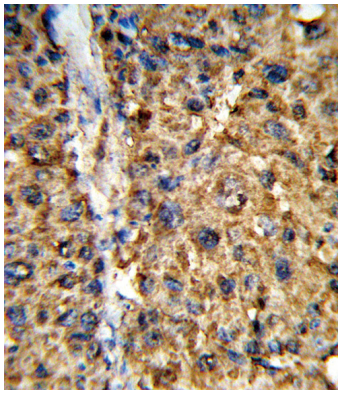
Images



Anti-GSTA2 Antibody (N-term) at 1:1000 dilution + human liver lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 26 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Western blot analysis of GSTA2 Antibody (N-term) (Cat. #AP9413a) in MDA-MB231 cell line lysates (35ug/lane). GSTA2 (arrow) was detected using the purified Pab.



Formalin-fixed and paraffin-embedded human hepatocarcinoma reacted with GSTA2 Antibody (N-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

Citations

- Activation of Wnt/β-catenin signalling via GSK3 inhibitors direct differentiation of human adipose stem cells into functional hepatocytes.
- Direct differentiation of homogeneous human adipose stem cells into functional hepatocytes by mimicking liver embryogenesis.