

#### **GSTA2** Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP9413a

#### Specification

## **GSTA2** Antibody (N-term) - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Antigen Region IHC-P, WB,E <u>P09210</u> <u>P08263, 016772, 07RTV2</u> Human Rabbit Polyclonal Rabbit IgG 1-30

### **GSTA2** Antibody (N-term) - 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** IHC-P~~1:10~50 WB~~1:1000 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.

#### **GSTA2** Antibody (N-term) - Protein Information

Name GSTA2



Synonyms GST2

Function Catalyzes the conjugation of glutathione to a large variety of electrophilic compounds.

Cellular Location Cytoplasm.

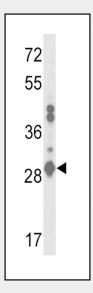
Tissue Location Liver..

# GSTA2 Antibody (N-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

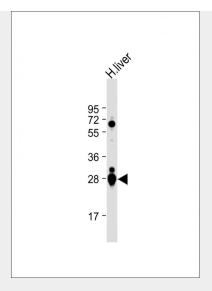
- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

### GSTA2 Antibody (N-term) - Images

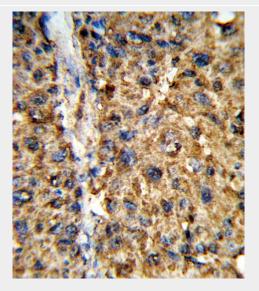


Western blot analysis of GSTA2 Antibody (N-term) (Cat. #AP9413a) in MDA-MB231 cell line lysates (35ug/lane). GSTA2 (arrow) was detected using the purified Pab.





Anti-GSTA2 Antibody (N-term) at 1:1000 dilution + human liver lysate Lysates/proteins at 20  $\mu$ g 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.



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.

# GSTA2 Antibody (N-term) - 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-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.

### **GSTA2 Antibody (N-term) - 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) **GSTA2 Antibody (N-term) - 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.