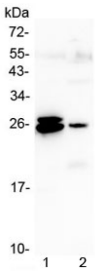
GSTA Antibody (alpha 1-5) (R32901)

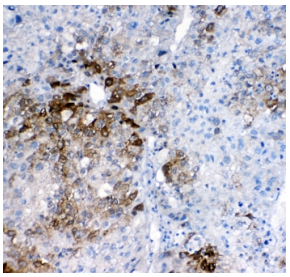
Catalog No.	Formulation	Size
R32901	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

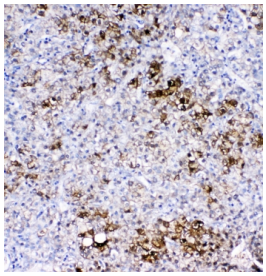
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2.5% BSA, 0.025% sodium azide
UniProt	P08263
Localization	Cytoplasmic
Applications	Western Blot: 0.5-1ug/ml Direct ELISA (recombinant human protein): 0.1-0.5ug/ml IHC (FFPE): 1-2ug/ml
Limitations	This GSTA antibody is available for research use only.



Western blot testing of 1) rat liver and 2) mouse liver lysate with GSTA antibody at 0.5ug/ml. Predicted molecular weight ~25 kDa.



IHC staining of FFPE human liver cancer with GSTA antibody. HIER: boil tissue sections in pH6, 10mM citrate buffer, for 10-20 min followed by cooling at RT for 20 min.



IHC staining of FFPE human liver cancer with GSTA antibody. HIER: boil tissue sections in pH6, 10mM citrate buffer, for 10-20 min followed by cooling at RT for 20 min.

Description

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.

Application Notes

Optimal dilution of the GSTA antibody should be determined by the researcher.

Immunogen

A recombinant human protein corresponding to amino acids A2-F222 was used as the immunogen for the GSTA antibody.

Storage

After reconstitution, the GSTA antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

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