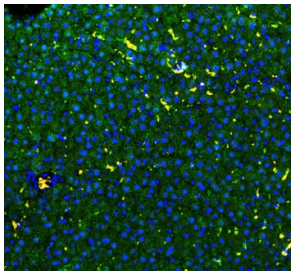
GSTA Antibody / Glutathione S-transferase alpha 1-5 (R31915)

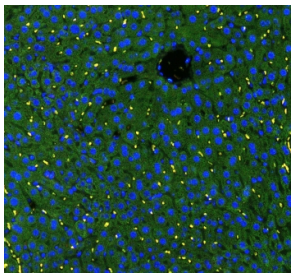
Catalog No.	Formulation	Size
R31915	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

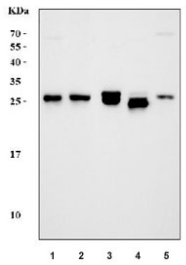
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2.5% BSA and 0.025% sodium azide
UniProt	P08263
Applications	Western Blot : 0.1-0.5ug/ml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



Immunofluorescent staining of FFPE rat liver with GSTA antibody (green) at 1ug/ml and DAPI nuclear stain (blue). HIER: boil tissue sections in pH6, 10mM citrate buffer, for 10-20 min and allow to cool before testing.



Immunofluorescent staining of FFPE mouse liver with GSTA antibody (green) at 1ug/ml and DAPI nuclear stain (blue). HIER: boil tissue sections in pH6, 10mM citrate buffer, for 10-20 min and allow to cool before testing.



Western blot testing of 1) human HCCT, 2) human HCCP, 3) rat liver, 4) rat RH35 and 5) mouse liver tissue lysate with GSTA antibody. Predicted molecular weight ~25 kDa.

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-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 (hepatocytes) and kidney (proximal tubules). 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

Amino acids MKLVQTRAILNYIASKYNLYGKDIKERALIDMYIE of human GSTA(1-5) were 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.

Ordering: Phone: 858.663.9055 | Fax: 1.267.821.0800 | Email: info@nsjbio.com