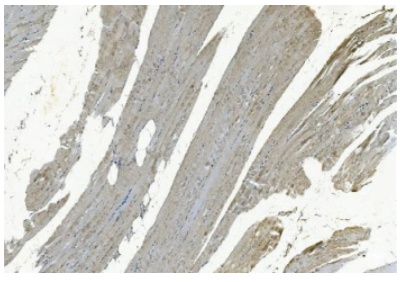
GSTA4 Antibody (RQ6181)

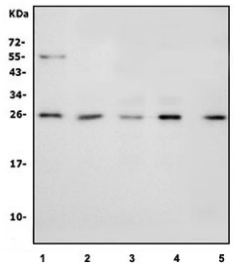
Catalog No.	Formulation	Size
RQ6181	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

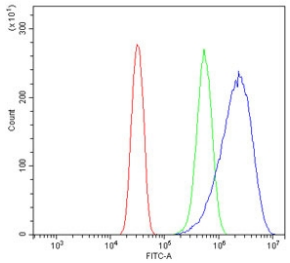
Availability	1-3 business days
Species Reactivity	Human, Monkey
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose and 0.0125% sodium azide
UniProt	O15217
Localization	Cytoplasmic
Applications	Western blot: 1-2ug/ml Immunohistochemistry (FFPE): 2-5ug/ml Flow cytometry: 1-3ug/million cells Direct ELISA: 0.1-0.5ug/ml
Limitations	This GSTA4 antibody is available for research use only.



IHC staining of FFPE human skeletal muscle with GSTA4 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



Western blot testing of human 1) placenta, 2) SH-SY5Y, 3) HepG2, 4) HEK293 and 5) monkey skeletal muscle lysate with GSTA4 antibody. Predicted molecular weight ~26 kDa.



Flow cytometry testing of human U-2 OS cells with GSTA4 antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= GSTA4 antibody.

Description

Glutathione S-transferase A4, also known as GSTA4, is an enzyme which in humans is encoded by the GSTA4 gene. 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 GSTA4 antibody should be determined by the researcher.

Immunogen

A human recombinant partial protein (amino acids E29-P222) was used as the immunogen for the GSTA4 antibody.

Storage

After reconstitution, the GSTA4 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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