10320 Camino Santa Fe, Suite G
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Tel: 858.875.1900 Fax: 858.875.1999

Anti-GSTA1/A2/A3/A4/A5 Picoband Antibody

Catalog # ABO12949

Specification

Anti-GSTA1/A2/A3/A4/A5 Picoband Antibody - Product Information

Application	**WB**
Primary Accession	GSTA1: P08263
Host	**Rabbit**
Reactivity	**Human, Mouse, Rat**
Clonality	**Polyclonal**
Format	**Lyophilized**

Description
Rabbit IgG polyclonal antibody for GSTA1/A2/A3/A4/A5 detection. Tested with WB, Direct ELISA in Human;Mouse;Rat.

Reconstitution
Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-GSTA1/A2/A3/A4/A5 Picoband Antibody - Additional Information

Application Details
Western blot, 0.1-0.5 µg/ml
 Direct ELISA, 0.1-0.5 µg/ml

Subcellular Localization
Cytoplasm.

Tissue Specificity
Liver.

Contents
Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

Immunogen
E. coli-derived human GSTA1/A2/A3/A4/A5 recombinant protein (Position: A2-F222).

Purification
Immunogen affinity purified.

Cross Reactivity
No cross reactivity with other proteins.

Storage	**At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time. Avoid repeated freezing and thawing.**

Anti-GSTA1/A2/A3/A4/A5 Picoband Antibody - Protein Information

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Anti-GSTA1/A2/A3/A4/A5 Picoband Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-GSTA1/A2/A3/A4/A5 Picoband Antibody - Images

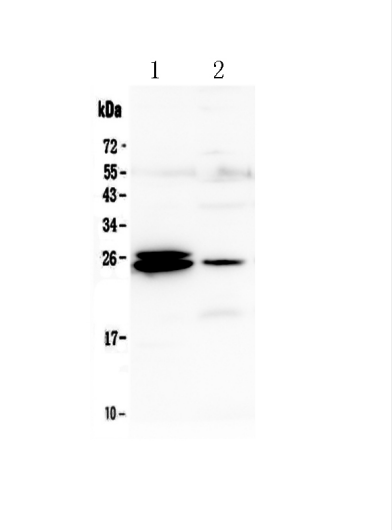

Figure 1. Western blot analysis of GSTA1/A2/A3/A4/A5 using anti-GSTA1/A2/A3/A4/A5 antibody (ABO12949). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: rat liver tissue lysates,Lane 2: mouse liver tissue lysates. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-GSTA1/A2/A3/A4/A5 antigen affinity purified polyclonal antibody (Catalog # ABO12949) at 0.5 ug/mL overnight at 4℃, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for GSTA1/A2/A3/A4/A5 at approximately 25,26KD. The expected band size for GSTA1/A2/A3/A4/A5 is at 25KD.

Anti-GSTA1/A2/A3/A4/A5 Picoband Antibody - 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.