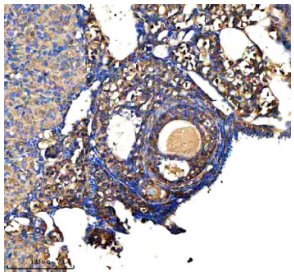
GST Mu 2 Antibody / GST Muscle Antibody (FY12861)

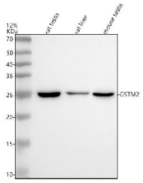
Catalog No.	Formulation	Size
FY12861	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml	100 ug

Bulk quote request

Availability	1-2 days
Species Reactivity	Mouse, Rat
Format	Lyophilized
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Immunogen affinity purified
Buffer	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4.
UniProt	P15626
Localization	Cytoplasm
Applications	Western Blot: 0.25-0.5ug/ml Immunohistochemistry: 2-5ug/ml
Limitations	This GST Mu 2 Antibody / GST Muscle Antibody is available for research use only.



GST Mu 2 Antibody in Mouse Ovary IHC. Immunohistochemistry testing of GST Mu 2 Antibody / GST Muscle Antibody in FFPE mouse ovary tissue at 2 ug/ml. Heat-induced epitope retrieval was performed using EDTA buffer, pH 8.0, followed by blocking with 10% goat serum. Tissue was incubated with primary antibody overnight at 4oC and detected using a peroxidase-conjugated secondary antibody with DAB substrate. This GST Mu 2 Antibody demonstrates cytoplasmic detection of GSTM2 in mouse ovarian tissue.



GST Mu 2 Antibody in Rat and Mouse Tissues WB. Western blot testing of GST Mu 2 Antibody / GST Muscle Antibody in rat testis (lane 1), rat liver (lane 2) and mouse testis (lane 3) tissue lysates at 0.5 ug/ml. A specific band is detected at approximately 26 kDa across the tested samples, consistent with the expected molecular weight of GSTM2. This GST Mu 2 Antibody demonstrates detection of GSTM2 in rat and mouse tissue lysates.

Description

GST Mu 2 Antibody / GST Muscle Antibody recognizes GSTM2, a cytosolic enzyme belonging to the mu class of glutathione S-transferases. GSTM2 catalyzes the conjugation of reduced glutathione to electrophilic compounds, an important step in cellular detoxification. Through this activity, the enzyme contributes to protection against reactive molecules generated during oxidative stress and exposure to environmental toxins, carcinogens and other xenobiotic compounds.

GSTM2 belongs to a closely related family of mu class GST enzymes encoded by a gene cluster on chromosome 1. These enzymes participate in phase II metabolism and help convert potentially harmful electrophilic compounds into more water-soluble products that can be eliminated from cells. GSTM2 also exhibits glutathione-dependent peroxidase activity, linking the protein to cellular redox regulation and defense against oxidative damage.

GSTM2 has historically been referred to as GST muscle and is studied in the context of tissue-specific metabolism as well as broader detoxification pathways. Expression and activity of mu class GST enzymes can influence cellular responses to environmental chemicals and therapeutic compounds. GSTM2 is consequently relevant to research in toxicology, pharmacology, oxidative stress and cancer biology, including studies examining how GST expression contributes to altered drug metabolism and cellular resistance to chemical stress.

This rabbit polyclonal antibody was generated against a synthetic peptide from the middle region of mouse GSTM2 and is immunogen affinity purified. NSJ Bioreagents provides this GST Mu 2 Antibody for research into glutathione-dependent metabolism, oxidative stress and GSTM2 biology. A GST Muscle Antibody targeting GSTM2 can support studies of this mu class enzyme and its contribution to cellular detoxification and redox homeostasis.

For additional reagents and information on GSTM2-mediated detoxification and oxidative stress responses, visit our GSTM2 Antibody / Glutathione S-Transferase Mu 2 Antibody page.

Application Notes

Optimal dilution of the GST Mu 2 Antibody / GST Muscle Antibody should be determined by the researcher.

Immunogen

A synthetic peptide corresponding to a sequence in the middle region of mouse GSTM2 was used as the immunogen for the GST Mu 2 Antibody.

Storage

After reconstitution, the GST Mu 2 Antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

Alternate Names

GST Mu 2 antibody, GSTM2 antibody, Glutathione S-Transferase Mu 2 antibody, GST muscle antibody

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