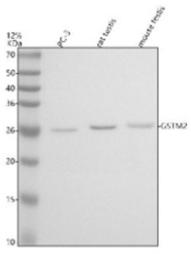
Glutathione S-Transferase Mu 2 Antibody / GSTM2 Detoxification Enzyme (FY13243)

Catalog No.	Formulation	Size
FY13243	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	Human, 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	P28161
Applications	Western Blot: 0.25-0.5ug/ml
Limitations	This Glutathione S-Transferase Mu 2 Antibody / GSTM2 Detoxification Enzyme is available for research use only.



Glutathione S-Transferase Mu 2 Antibody in Human, Rat and Mouse Samples WB. Western blot testing of Glutathione S-Transferase Mu 2 Antibody / GSTM2 Detoxification Enzyme in human PC-3 prostate cancer cells (lane 1), rat testis (lane 2) and mouse testis (lane 3) 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 Glutathione S-Transferase Mu 2 Antibody demonstrates detection of GSTM2 in human, rat and mouse samples.

Description

Glutathione S-Transferase Mu 2 Antibody / GSTM2 Detoxification Enzyme recognizes GSTM2, a cytosolic member of the mu class of glutathione S-transferases. GSTM2 participates in cellular detoxification by catalyzing the conjugation of reduced glutathione to electrophilic compounds. This reaction can increase the solubility of potentially harmful molecules and facilitate their removal while protecting cellular macromolecules from chemical and oxidative damage.

GSTM2 belongs to a cluster of closely related mu class GST enzymes that contribute to phase II xenobiotic metabolism. These enzymes act on a variety of endogenous and exogenous substrates, including reactive products generated by oxidative stress, environmental chemicals and other electrophilic compounds. GSTM2 also exhibits glutathione-dependent peroxidase activity and is therefore studied in the context of redox homeostasis, lipid peroxidation and cellular defense against oxidative damage.

Expression and activity of glutathione S-transferases can influence how cells respond to environmental toxins, carcinogens and therapeutic compounds. GSTM2 and related GST enzymes have consequently been investigated in toxicology, pharmacology and cancer biology. Changes in GST expression may affect cellular sensitivity to chemical stress and can contribute to altered metabolism of xenobiotics and drugs. GSTM2 is also known historically as GST muscle, reflecting its association with muscle tissue, although expression occurs in additional tissues.

This rabbit polyclonal antibody was generated against a synthetic peptide from the middle region of human GSTM2 and is immunogen affinity purified. NSJ Bioreagents provides this Glutathione S-Transferase Mu 2 Antibody for research into GSTM2 biology, glutathione-dependent metabolism and cellular defense mechanisms. A GSTM2 Detoxification Enzyme antibody can support studies of oxidative stress, xenobiotic metabolism and the molecular pathways that protect cells from electrophilic compounds.

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 Glutathione S-Transferase Mu 2 Antibody / GSTM2 Detoxification Enzyme should be determined by the researcher.

Immunogen

A synthetic peptide corresponding to a sequence in the middle region of human GSTM2 was used as the immunogen for the GSTM2 antibody.

Storage

After reconstitution, the GSTM2 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

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

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