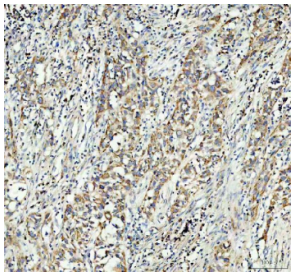
Glutathione S-Transferase Mu 3 Antibody / GSTM3 Detoxification Enzyme (RQ4127)

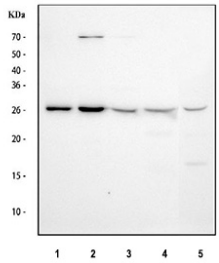
Catalog No.	Formulation	Size
RQ4127	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human, Mouse
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	P21266
Localization	Cytoplasmic
Applications	Western Blot: 0.5-1ug/ml Immunohistochemistry (FFPE): 2-5ug/ml Direct ELISA: 0.1-0.5ug/ml
Limitations	This Glutathione S-Transferase Mu 3 Antibody / GSTM3 Detoxification Enzyme is available for research use only.



Glutathione S-Transferase Mu 3 Antibody in Human Bladder Cancer IHC. Immunohistochemistry testing of Glutathione S-Transferase Mu 3 Antibody / GSTM3 Detoxification Enzyme in FFPE human bladder cancer tissue. Heat-induced epitope retrieval was performed using EDTA buffer, pH 8.0. Staining is observed predominantly in tumor epithelial cells with cytoplasmic localization. Detection was performed using an HRP-conjugated secondary antibody and DAB substrate with hematoxylin counterstaining. This Glutathione S-Transferase Mu 3 Antibody demonstrates detection of GSTM3 in human bladder tumor tissue.



Glutathione S-Transferase Mu 3 Antibody in Human and Mouse Samples WB. Western blot testing of Glutathione S-Transferase Mu 3 Antibody / GSTM3 Detoxification Enzyme in human HeLa (lane 1), MCF7 (lane 2), SiHa (lane 3), THP-1 (lane 4) and mouse testis (lane 5) lysates at 0.5 ug/ml. A prominent band is detected at approximately 26 kDa, consistent with the predicted molecular weight of GSTM3. This Glutathione S-Transferase Mu 3 Antibody demonstrates detection of GSTM3 in human and mouse samples.

Description

Glutathione S-Transferase Mu 3 Antibody / GSTM3 Detoxification Enzyme recognizes GSTM3, a cytosolic member of the mu class of glutathione S-transferases. GSTM3 participates in cellular detoxification by catalyzing the conjugation of reduced glutathione to electrophilic compounds. This reaction helps neutralize potentially damaging molecules and facilitates their subsequent elimination, providing an important cellular defense against xenobiotics, environmental chemicals and reactive products generated during oxidative stress.

GSTM3 belongs to a cluster of closely related mu class glutathione S-transferases encoded on chromosome 1. These phase II detoxification enzymes contain conserved glutathione-binding and substrate-binding regions that enable metabolism of a broad range of electrophilic compounds. Through glutathione-dependent metabolism, GSTM3 contributes to cellular redox balance and protection against chemical and oxidative damage.

GSTM3 has been investigated extensively in toxicology, pharmacogenomics and cancer biology. Genetic polymorphisms and altered GSTM3 expression can influence detoxification capacity and cellular responses to environmental exposures. Changes in GSTM3 have also been studied in relation to cancer susceptibility, tumor progression and response to therapeutic compounds. These associations make GSTM3 relevant to research examining how metabolic defense mechanisms and oxidative stress contribute to disease development.

This rabbit polyclonal antibody was generated against a recombinant fragment corresponding to amino acids 93-206 of human GSTM3 and is antigen affinity purified. NSJ Bioreagents provides this Glutathione S-Transferase Mu 3 Antibody for research into glutathione-dependent metabolism, oxidative stress and cellular defense mechanisms. A GSTM3 Detoxification Enzyme antibody can support investigation of GSTM3 expression and its role in xenobiotic metabolism and protection from electrophilic compounds.

For additional reagents and information on GSTM3-mediated detoxification and oxidative stress responses, visit our GSTM3 Antibody / Glutathione S-Transferase Mu 3 Antibody page.

Application Notes

Optimal dilution of the Glutathione S-Transferase Mu 3 Antibody / GSTM3 Detoxification Enzyme should be determined by the researcher.

Immunogen

A recombinant human partial protein corresponding to amino acids E93-Q206 was used as the immunogen for the Glutathione S-Transferase Mu 3 Antibody.

Storage

After reconstitution, the Glutathione S-Transferase Mu 3 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 3 antibody, GSTM3 antibody, GST Mu 3 antibody, GSTM3-3 antibody

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