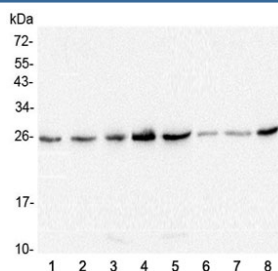


GSTM1 Antibody / Glutathione S-Transferase Mu 1 Antibody [clone 11F2] (RQ4483)

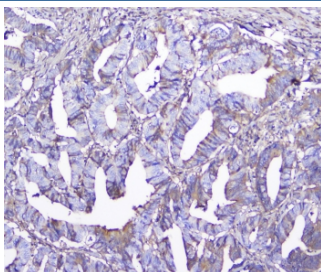
Catalog No.	Formulation	Size
RQ4483	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

[Bulk quote request](#)

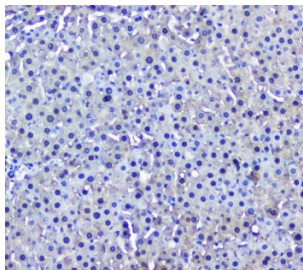
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1
Clone Name	11F2
Purity	Protein G affinity
Buffer	Lyophilized from 1X PBS with 2% Trehalose and 0.025% sodium azide
UniProt	P09488
Localization	Cytoplasm
Applications	Western Blot : 0.5-1ug/ml Immunohistochemistry (FFPE) : 2-4ug/ml Flow Cytometry : 1-3ug/1x10 ⁶ cells
Limitations	This GSTM1 Antibody / Glutathione S-Transferase Mu 1 Antibody is available for research use only.



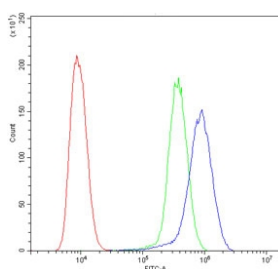
GSTM1 Antibody in Human, Mouse and Rat Samples WB. Western blot testing of GSTM1 Antibody / Glutathione S-Transferase Mu 1 Antibody in human HeLa and T-47D cells, rat brain, lung and stomach, and mouse lung, stomach and kidney lysates at 0.5 ug/ml. A prominent band is detected at approximately 26 kDa, consistent with the predicted molecular weight of GSTM1. This GSTM1 Antibody demonstrates detection of glutathione S-transferase Mu 1 across human, mouse and rat samples.



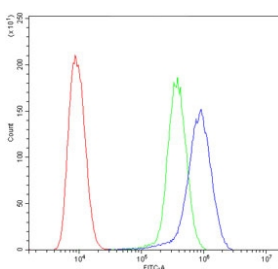
GSTM1 Antibody in Human Colon Cancer IHC. Immunohistochemistry testing of GSTM1 Antibody / Glutathione S-Transferase Mu 1 Antibody in FFPE human colon cancer tissue at 2 ug/ml. Heat-induced epitope retrieval was performed by boiling tissue sections in 10 mM citrate buffer, pH 6, for 10-20 min followed by cooling at RT for 20 min. This GSTM1 Antibody demonstrates detection of glutathione S-transferase Mu 1 in human colon tumor tissue.



GSTM1 Antibody in Rat Liver IHC. Immunohistochemistry testing of GSTM1 Antibody / Glutathione S-Transferase Mu 1 Antibody in FFPE rat liver tissue at 2 ug/ml. Heat-induced epitope retrieval was performed by boiling tissue sections in 10 mM citrate buffer, pH 6, for 10-20 min followed by cooling at RT for 20 min. This GSTM1 Antibody demonstrates detection of glutathione S-transferase Mu 1 in rat liver tissue.



GSTM1 Antibody in Human HeLa Cervical Cancer Cells FACS. Flow cytometry testing of GSTM1 Antibody / Glutathione S-Transferase Mu 1 Antibody in human HeLa cervical cancer cells at 1 ug/million cells following blocking with goat serum. Red represents cells alone, green the isotype control and blue GSTM1 Antibody staining. This GSTM1 Antibody demonstrates detection of glutathione S-transferase Mu 1 in HeLa cells.



GSTM1 Antibody in Human U-2 OS Osteosarcoma Cells FACS. Flow cytometry testing of GSTM1 Antibody / Glutathione S-Transferase Mu 1 Antibody in human U-2 OS osteosarcoma cells at 1 ug/million cells following blocking with goat serum. Red represents cells alone, green the isotype control and blue GSTM1 Antibody staining. This GSTM1 Antibody demonstrates detection of glutathione S-transferase Mu 1 in U-2 OS cells.

Description

GSTM1 Antibody / Glutathione S-Transferase Mu 1 Antibody recognizes GSTM1, a cytosolic enzyme belonging to the mu class of glutathione S-transferases. GSTM1 participates in cellular detoxification by catalyzing the conjugation of reduced glutathione to electrophilic compounds. Substrates include products of oxidative stress as well as a variety of environmental toxins, carcinogens and xenobiotic compounds. Through these reactions, GSTM1 contributes to cellular defense against potentially damaging reactive molecules.

GSTM1 belongs to a larger family of soluble glutathione S-transferases with distinct alpha, mu, pi, theta and other classes. Members of the mu class are encoded by a gene cluster on chromosome 1 and share related roles in glutathione-dependent metabolism. GSTM1 activity is therefore relevant to research involving xenobiotic metabolism, oxidative stress responses, cellular detoxification and mechanisms that influence sensitivity to chemical exposure.

The GSTM1 gene is highly polymorphic, and a common homozygous deletion results in the GSTM1-null genotype and complete absence of functional GSTM1 protein. This genetic variation has been extensively investigated for its potential influence on susceptibility to environmental carcinogens, drug responses and risk for multiple diseases. Associations between GSTM1 status and cancer have received particular attention because reduced detoxification capacity may alter cellular exposure to genotoxic compounds. GSTM1 is consequently studied at the intersection of metabolism, toxicology,

oxidative stress and cancer biology.

This mouse monoclonal antibody was generated against a peptide derived from human GSTM1 and is Protein G affinity purified. NSJ Bioreagents provides this GSTM1 Antibody for research into glutathione-dependent detoxification, oxidative stress and GSTM1 biology. A Glutathione S-Transferase Mu 1 Antibody can support investigation of this enzyme and its role in cellular defense against electrophilic and xenobiotic compounds.

Explore our [Cancer Marker Antibodies](#) page for additional reagents targeting proteins involved in tumor biology, cellular stress responses and cancer-related molecular pathways.

Application Notes

Optimal dilution of the GSTM1 Antibody / Glutathione S-Transferase Mu 1 Antibody should be determined by the researcher.

Immunogen

Amino acids EEEKIRVDILENQTMDNMQGLGMICYNPEFEKLLK were used as the immunogen for the GSTM1 antibody.

Storage

After reconstitution, the GSTM1 antibody can be stored for up to one month at 4°C. For long-term, aliquot and store at -20°C. Avoid repeated freezing and thawing.

Alternate Names

GSTM1 antibody, Glutathione S-Transferase Mu 1 antibody, GST Mu 1 antibody, GSTM1-1 antibody