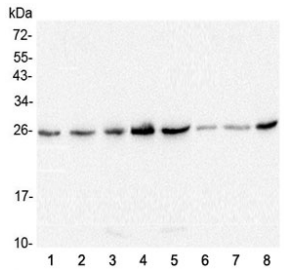
GSTM1 Antibody [clone 11F2] (RQ4483)

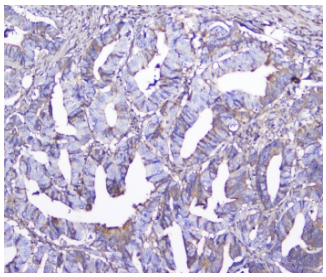
Catalog No.	Formulation	Size
RQ4483	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

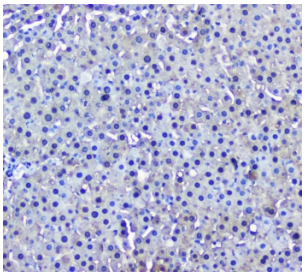
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Purified
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1
Clone Name	11F2
Purity	Protein G affinity
Buffer	Lyophilized from 1X PBS with 2% Trehalose and 0.025% sodium azide
UniProt	P09488
Localization	Cytoplasm
Applications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



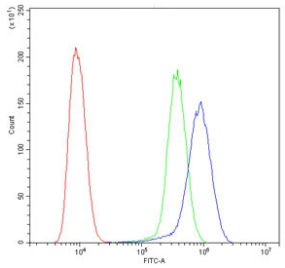
Western blot testing of 1) human HeLa, 2) human T-47D, 3) rat brain, 4) rat lung, 5) rat stomach, 6) mouse lung, 7) mouse stomach and 8) mouse kidney lysate with GSTM1 antibody at 0.5ug/ml. Predicted molecular weight ~26 kDa.



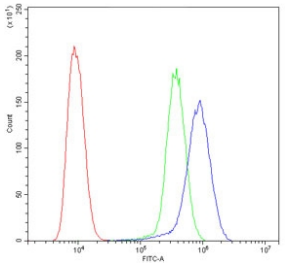
IHC testing of FFPE human colon cancer with GSTM1 antibody at 2ug/ml. HIER: boil tissue sections in pH6, 10mM citrate buffer, for 10-20 min followed by cooling at RT for 20 min.



IHC testing of FFPE rat liver with GSTM1 antibody at 2ug/ml. HIER: boil tissue sections in pH6, 10mM citrate buffer, for 10-20 min followed by cooling at RT for 20 min.



Flow cytometry testing of human HeLa cells with GSTM1 antibody at 1ug/10^6 cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= GSTM1 antibody.



Flow cytometry testing of human U-2 OS cells with GSTM1 antibody at 1ug/10^6 cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= GSTM1 antibody.

Description

Glutathione S-transferase Mu 1 (gene name GSTM1) is a human glutathione S-transferase. Cytosolic and membrane-bound forms of glutathione S-transferase are encoded by two distinct supergene families. 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-transferase that belongs to the mu class. The mu class of enzymes functions in the detoxification of electrophilic compounds, including carcinogens, therapeutic drugs, environmental toxins and products of oxidative stress, by conjugation with glutathione. The genes encoding the mu class of enzymes are organized in a gene cluster on chromosome 1p13.3 and 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 certain drugs. Null mutations of this class mu gene have been linked with an increase in a number of cancers, likely due to an increased susceptibility to environmental toxins and carcinogens. Multiple protein isoforms are encoded by transcript variants of this gene.

Application Notes

Optimal dilution of the GSTM1 antibody should be determined by the researcher.

Immunogen

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

Storage

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