

# **Product datasheet for AM06706SU-N**

### OriGene Technologies, Inc.

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## **GSTM1 Mouse Monoclonal Antibody [Clone ID: 1H4F2]**

#### **Product data:**

**Product Type:** Primary Antibodies

Clone Name: 1H4F2

**Applications:** ELISA, FC, IHC, WB

Recommended Dilution: Western Blot: 1/500 - 1/2000.

Immunohistochemistry on paraffin sections 1/200 - 1/1000.

**Flow cytometry:** 1/200 - 1/400.

**ELISA**: 1/10000.

Reactivity: Human, Rat

Host: Mouse Isotype: IgG1

Clonality: Monoclonal

**Immunogen:** Purified recombinant fragment of human GSTM1 expressed in E. Coli.

**Specificity:** This antibody reacts to GSTM1.

Formulation: State: Ascites

State: Ascitic fluid containing 0.03% sodium azide.

**Conjugation:** Unconjugated

**Storage:** Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer.

Avoid repeated freezing and thawing.

**Stability:** Shelf life: one year from despatch.

**Predicted Protein Size:** 26 kDa

**Gene Name:** glutathione S-transferase mu 1

Database Link: Entrez Gene 2944 Human

P09488





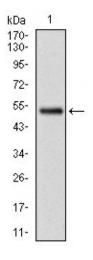
#### Background:

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.

Synonyms:

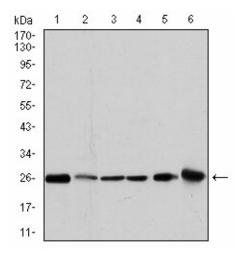
Glutathione S-transferase Mu 1, GST class-mu 1, GSTM1-1, GST1, GSTM1a-1a, GSTM1b-1b, GTH4

### **Product images:**

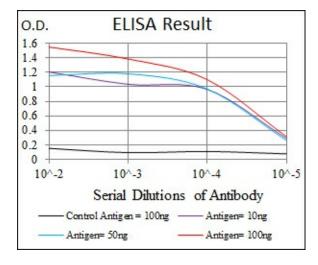


Western blot analysis using GSTM1 mAb against human GSTM1 (AA: 23-181) recombinant protein. (Expected MW is 25.7 kDa)

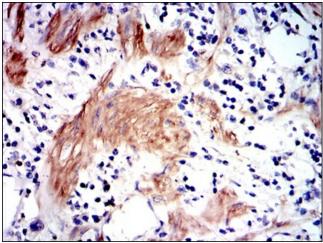




Western blot analysis using GSTM1 mouse mAb against MCF-7 (1), PC-12 (2), Jurkat (3), Hela (4), HL7702 (5) and HepG2 (6) cell lysate.

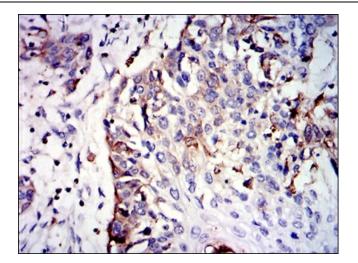


Red: Control Antigen (100ng) Purple: Antigen (10ng) Green: Antigen (50ng) Blue: Antigen (100ng)

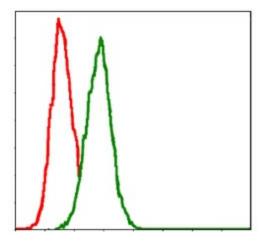


Immunohistochemical analysis of paraffinembedded stomach cancer tissues using GSTM1 mouse mAb with DAB staining.





Immunohistochemical analysis of paraffinembedded esophageal cancer tissues using GSTM1 mouse mAb with DAB staining.



Flow cytometric analysis of Hela cells using GSTM1 mouse mAb (green) and negative control (red).