

## **GSTM1 Antibody (monoclonal) (M01)**

Mouse monoclonal antibody raised against a partial recombinant GSTM1.

Catalog # AT2278a

### **Specification**

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#### **GSTM1 Antibody (monoclonal) (M01) - Product Information**

Application	E
Primary Accession	<a href="#">P09488</a>
Other Accession	<a href="#">BC024005</a>
Reactivity	Human
Host	mouse
Clonality	Monoclonal
Isotype	IgG2a Kappa
Calculated MW	25712

#### **GSTM1 Antibody (monoclonal) (M01) - Additional Information**

**Gene ID** 2944

##### **Other Names**

Glutathione S-transferase Mu 1, GST HB subunit 4, GST class-mu 1, GSTM1-1, GSTM1a-1a, GSTM1b-1b, GTH4, GSTM1, GST1

##### **Target/Specificity**

GSTM1 (AAH24005, 1 a.a. ~ 100 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.

##### **Format**

Clear, colorless solution in phosphate buffered saline, pH 7.2 .

##### **Storage**

Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

##### **Precautions**

GSTM1 Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

#### **GSTM1 Antibody (monoclonal) (M01) - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)

- [Flow Cytometry](#)
- [Cell Culture](#)

### **GSTM1 Antibody (monoclonal) (M01) - Images**

### **GSTM1 Antibody (monoclonal) (M01) - 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.

### **GSTM1 Antibody (monoclonal) (M01) - References**

Genetic polymorphisms of cytochrome P450 and glutathione S-transferase associated with antituberculosis drug-induced hepatotoxicity in Chinese tuberculosis patients. Wang T, et al. J Int Med Res, 2010 May-Jun. PMID 20819434. Polymorphic DNA repair and metabolic genes: a multigenic study on gastric cancer. Palli D, et al. Mutagenesis, 2010 Sep 3. PMID 20817763. Maternal Nrf2 and glutathione-S-transferase polymorphisms do not modify associations of prenatal tobacco smoke exposure with asthma and lung function in school-aged children. Henderson AJ, et al. Thorax, 2010 Oct. PMID 20805158. Glutathione S-transferase M1 (GSTM1) genotype but not GSTT1 or MC1R genotype influences erythematous sensitivity to narrow band (TL-01) UVB phototherapy. Smith G, et al. Pharmacogenet Genomics, 2010 Aug 26. PMID 20802377. Evidence that polymorphic deletion of the glutathione s-transferase gene, GSTM1, is associated with esophageal atresia. Filonzi L, et al. Birth Defects Res A Clin Mol Teratol, 2010 Aug 25. PMID 20740495.