

Mouse Anti-GSTM1 (Glutathione S-Transferase Mu1) [MD106]: MC0406, MC0406RTU7

Intended Use: For Research Use Only

Description: 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.

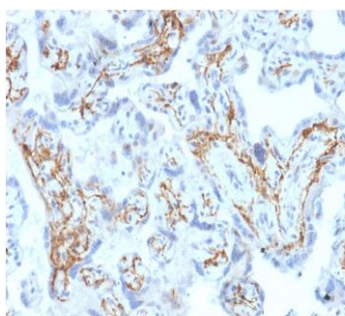
Specifications:

Clone: MD106
 Source: Mouse
 Isotype: IgG1k
 Reactivity: Human
 Immunogen: Recombinant human full-length GSTM1 protein
 Localization: Cytoplasm
 Formulation: Purified antibody in PBS pH7.4, containing BSA and $\leq 0.09\%$ sodium azide (NaN₃).
 Storage: Store at 2°- 8°C
 Applications: IHC, WB
 Package:

Description	Catalog No.	Size
GSTM1 Concentrated	MC0406	1 ml
GSTM1 Prediluted	MC0406RTU7	7 ml

IHC Procedure*:

Positive Control Tissue: Kidney, liver or placenta tissues, HeLa, MCF7 or HepG2 cells
 Concentrated Dilution: 50-200
 Pretreatment: Tris EDTA pH9.0, 15 minutes Pressure Cooker or 30-60 minutes water bath at 95°-99°C
 Incubation Time and Temp: 30-60 minutes @ RT
 Detection: Refer to the detection system manual
 * Result should be confirmed by an established diagnostic procedure.



FFPE human placenta stained with anti-GSTM1 using DAB

References:

1. Glutathione Conjugation at the Blood-CSF Barrier Efficiently Prevents Exposure of the Developing Brain Fluid Environment to Blood-Borne Reactive Electrophilic Substances. Kratzer I, et al. J Neurosci 38:3466-3479, 2018.
2. Integrated transcriptomic and proteomic analyses uncover regulatory roles of Nrf2 in the kidney. Shelton LM, et al. Kidney Int 88:1261-1273, 2015.

Doc. 100-MC0406
Rev. A