Anti-Glutathione S Transferase mu 1 Rabbit mAb

Purified Recombinant Rabbit Monoclonal Antibody

Catalog # R011901

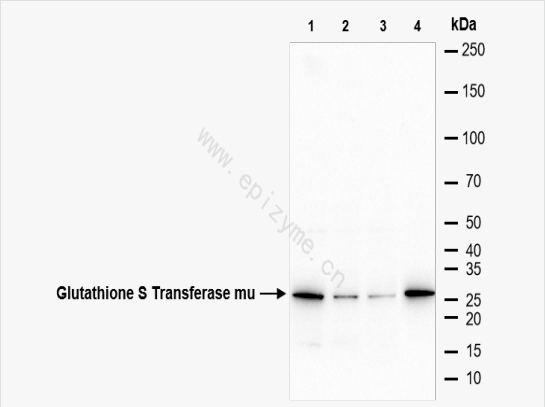
Product Information

Application	WB, IF (Cell)/ICC, ELISA
Reactivity	Mouse, Rat, Human
Dilution	WB 1:1,000~1:2,000; IF 1:100~1:200
Host	Rabbit
Clonality	Monoclonal
Clone No.	91M70K15
Isotype	IgG
Label	Unconjugated
Immunogen	A synthesized peptide derived from human Glutathione S Transferase mu
Format	Affinity purified monoclonal antibody supplied in PBS with 0.01% sodium azide and 50% glycerol, pH 7.3.
Storage	Shipped on wet ice. Store at -20°C. Stable for 24 months from date of receipt. Aliquoting is unnecessary for -20°C storage.
Precautions	Anti-Glutathione S Transferase mu 1 antibody [91M70K15] is for research use only and not for use in diagnostic or therapeutic procedures.

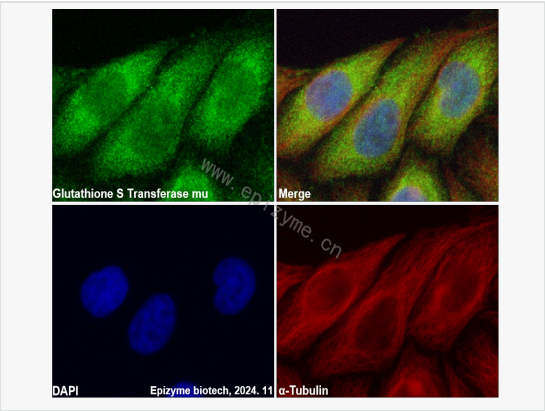
Protein Information

Synonyms	Glutathione S alkyltransferase, Glutathione S aralkyltransferase, Glutathione S aryltransferase, Glutathione S transferase M1, Glutathione S transferase mu 1, Glutathione S transferase mu, Glutathione S-transferase Mu 1, GST class mu 1, GST class Mu, GST class-mu 1, GST HB subunit 4, GST mu, GST1, GSTM1 1, Gstm1, GSTM1-1, GSTM1_HUMAN, GSTM1a 1a, GSTM1a-1a, GSTM1b 1b, GSTM1b-1b, GTH4, GTM1, H B, HB subunit 4, MGC26563, MU 1, MU, S (hydroxyalkyl)glutathione lyase.
Calculated MW	Calculated MW: 26 kDa; Observed MW: 26 kDa
Uniprot ID	P09488
Gene ID	2944
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.

Validation Images



Western Blot - Anti-Glutathione S Transferase mu 1 Rabbit mAb [91M70K15]
All lanes: R011901 at 1:1,000 dilution
Lane 1: HEL (Human erythroleukemia cell) whole cell lysates
Lane 2: HepG2 (Human hepatocarcinoma epithelial cell) whole cell lysates
Lane 3: HCT116 (Human colorectal carcinoma epithelial cell) whole cell lysates
Lane 4: Rat spleen whole tissue lysates
Lysates/proteins at 10 µg per lane.
Secondary antibody: Goat Anti-Rabbit IgG(H+L), HRP Conjugated (Cat. No. LF102) at 1:5,000 dilution
Predicted band size: 26 kDa
Observed band size: 26 kDa
Developed using the ECL technique (Cat. No. SQ201).



Immunofluorescence - Anti-Glutathione S Transferase mu 1 Rabbit mAb [91M70K15]
Sample: HeLa cells
The cells were fixed with 4% paraformaldehyde (10 min), permeabilized with 0.5% Triton X-100 for 10 minutes and then blocked with 5% BSA in 0.1% PBS-Tween for 0.5 hours.
Primary antibodies: R011901 at 1:100 dilution and α-tubulin Mouse Monoclonal Antibody (Cat. No. LF209) at 1:100 dilution
Secondary antibodies: Goat anti-Rabbit (488) at 1:1,000 dilution (shown in green) and Goat anti-Mouse (555) at 1:1,000 dilution (shown in red)
Nuclei were stained with DAPI (shown in blue).