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Goat Anti-GSTM1 / GSTM2 Antibody

Peptide-affinity purified goat antibody
Catalog # AF1514a

Specification

Goat Anti-GSTM1 / GSTM2 Antibody - Product Information

Application	**WB**
Primary Accession	P09488
Other Accession	NP_000839, 2944, 2946
Reactivity	**Human**
Host	**Goat**
Clonality	**Polyclonal**
Concentration	**100ug/200ul**
Isotype	**IgG**
Calculated MW	**25712**

Goat Anti-GSTM1 / GSTM2 Antibody - Additional Information

Gene ID 2944

Other Names
Glutathione S-transferase Mu 1, 2.5.1.18, GST HB subunit 4, GST class-mu 1, GSTM1-1, GSTM1a-1a, GSTM1b-1b, GTH4, GSTM1, GST1

Format
0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
Goat Anti-GSTM1 / GSTM2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-GSTM1 / GSTM2 Antibody - Protein Information

Name GSTM1 (HGNC:4632)

Synonyms GST1

Function
Conjugation of reduced glutathione to a wide number of exogenous and endogenous hydrophobic electrophiles. Involved in the formation of glutathione conjugates of both prostaglandin A2 (PGA2) and prostaglandin J2 (PGJ2) (PubMed:9084911). Participates in the formation of novel hepoxilin regioisomers

(PubMed:21046276).

Cellular Location
Cytoplasm.

Tissue Location
Liver (at protein level).

Goat Anti-GSTM1 / GSTM2 Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Goat Anti-GSTM1 / GSTM2 Antibody - Images



AF1514a (0.3 µg/ml) staining of Human Lung lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

Goat Anti-GSTM1 / GSTM2 Antibody - 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.

Goat Anti-GSTM1 / GSTM2 Antibody - 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.
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Glutathione S-transferase M1 (GSTM1) genotype but not GSTT1 or MC1R genotype influences erythemal 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.