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Anti-Human GSTM1 DyLight® 488 conjugated Antibody(monoclonal, 11F2)

Catalog # ABO14790

Product Information

Application	FC
Primary Accession	P09488
Host	Mouse
Isotype	Mouse IgG1
Reactivity	Human
Clonality	Monoclonal
Format	Liquid
Description	Anti-Human GSTM1 DyLight® 488 conjugated Antibody (monoclonal, 11F2) . Tested in Flow Cytometry applications. This antibody reacts with Human.

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 (HGNC:4632), GST1
Calculated MW	25712
Application Details	Flow Cytometry, 1-3 □g/1x10^6 cells
Subcellular Localization	Cytoplasm.
Tissue Specificity	Liver (at protein level).
Source	Eukaryota
Contents	Each vial contains 50% glycerol, 0.9% NaCl, 0.2% Na2HPO4, 0.02% NaN3.
Clone Names	Clone: 11F2
Immunogen	A synthetic peptide corresponding to a sequence in the middle region of human GSTM1, which shares 70.6% and 73.5% amino acid (aa) sequence identity with mouse and rat GSTM1, respectively.
Cross Reactivity	No cross-reactivity with other proteins.
Storage	At -20°C for one year from date of receipt. Avoid repeated freezing and thawing. Protect from light.

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).

Background

Glutathione S-transferase Mu 1 (gene name GSTM1) is a human glutathione S-transferase. 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.