



# Human GSTM1 blocking peptide (CDBP1441)

This product is for research use only and is not intended for diagnostic use.

## PRODUCT INFORMATION

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| <b>Product Overview</b>    | Blocking/Immunizing peptide for anti-GSTM1/GSTM2 antibody                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Antigen Description</b> | 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. |
| <b>Species</b>             | Human                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Conjugate</b>           | Unconjugated                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Applications</b>        | Apuri, BL, ELISA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Format</b>              | Lyophilized powder                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Size</b>                | 100 µg                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Preservative</b>        | None                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Storage</b>             | Shipped at ambient temperature, store at -20°C.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |

## GENE INFORMATION

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| <b>Gene Name</b>           | <a href="#">GSTM1 glutathione S-transferase mu 1 [ Homo sapiens ]</a>                                                                                                                                                                                                                                                                                                                                        |
| <b>Official Symbol</b>     | GSTM1                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Synonyms</b>            | GSTM1; glutathione S-transferase mu 1; glutathione S transferase M1 , GST1; glutathione S-transferase Mu 1; H B; MU; HB subunit 4; GST class-mu 1; GST HB subunit 4; glutathione S-transferase M1; glutathione S-aryltransferase; glutathione S-alkyltransferase; glutathione S-aralkyltransferase; S-(hydroxyalkyl)glutathione lyase; H-B; GST1; GTH4; GTM1; MU-1; GSTM1-1; GSTM1a-1a; GSTM1b-1b; MGC26563; |
| <b>Entrez Gene ID</b>      | <a href="#">2944</a>                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>mRNA Refseq</b>         | <a href="#">NM_000561</a>                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Protein Refseq</b>      | <a href="#">NP_000552</a>                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>UniProt ID</b>          | P09488                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Chromosome Location</b> | 1p13.3                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Pathway</b>             | Biological oxidations, organism-specific biosystem; C-MYB transcription factor network, organism-specific biosystem; Drug metabolism - cytochrome P450, organism-specific biosystem; Drug metabolism - cytochrome P450, conserved biosystem; Glutathione conjugation, organism-specific biosystem; Glutathione metabolism, organism-specific biosystem; Glutathione metabolism, organism-specific biosystem; |
| <b>Function</b>            | glutathione transferase activity; transferase activity;                                                                                                                                                                                                                                                                                                                                                      |