

## Recombinant Human GSTM5 Protein, Myc/DDK-tagged, C13 and N15-labeled

Cat. No. GSTM5-1489H    Lot. No. (See product label)

### SPECIFICATION

|                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product Overview | GSTM5 MS Standard C13 and N15-labeled recombinant protein (NP_000842) with a C-terminal MYC/DDK tag, was expressed in HEK293 cells.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Species          | Human                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Source           | HEK293                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Description      | <p>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. Diversification of these genes has occurred in regions encoding substrate-binding domains, as well as in tissue expression patterns, to accommodate an increasing number of foreign compounds.</p> |
| Molecular Mass   | 25.5 kDa                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |

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|                       |                                                                                                                                                                                                                                                                           |
|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>AA Sequence</b>    | MPMTLGYWDIRGLAHAIRLLLEYTDSSYVEKKYTLGDAPDYDRSQWLNEKFKLGLDF<br>PNLPYLIDGTHKITQSNAILRYIARKHNLCGETEEEEKIRVDILENQVMDNHMELVRLCY<br>DPDFEKLKPKYLEELPEKLLKYSEFLGKRPWFAGDKITFVDLAYDVLDMKRIFEPKC<br>LDAFLNLKDFISRFEGLKKISAYMKSSQFLRGLLFGKSATWNSKTRTRPLEQKLISEE<br>DLAANDILDYKDDDDKV |
| <b>Purity</b>         | > 80% as determined by SDS-PAGE and Coomassie blue staining                                                                                                                                                                                                               |
| <b>Stability</b>      | Stable for 3 months from receipt of products under proper storage and handling conditions.                                                                                                                                                                                |
| <b>Storage</b>        | Store at -80 centigrade. Avoid repeated freeze-thaw cycles.                                                                                                                                                                                                               |
| <b>Concentration</b>  | 50 µg/mL as determined by BCA                                                                                                                                                                                                                                             |
| <b>Storage Buffer</b> | 100 mM glycine, 25 mM Tris-HCl, pH 7.3.                                                                                                                                                                                                                                   |

## GENE INFORMATION

|                        |                                                                                                                                                                                                                                                                                                                   |
|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Gene Name</b>       | <a href="#">GSTM5 glutathione S-transferase mu 5 [ Homo sapiens (human) ]</a>                                                                                                                                                                                                                                     |
| <b>Official Symbol</b> | <a href="#">GSTM5</a>                                                                                                                                                                                                                                                                                             |
| <b>Synonyms</b>        | GSTM5; glutathione S-transferase mu 5; glutathione S transferase M5; glutathione S-transferase Mu 5; GST class-mu 5; glutathione S-transferase M5; glutathione S-aryltransferase M5; glutathione S-alkyltransferase M5; glutathione S-aralkyltransferase M5; S-(hydroxyalkyl)glutathione lyase M5; GTM5; GSTM5-5; |
| <b>Gene ID</b>         | <a href="#">2949</a>                                                                                                                                                                                                                                                                                              |
| <b>mRNA Refseq</b>     | <a href="#">NM_000851</a>                                                                                                                                                                                                                                                                                         |

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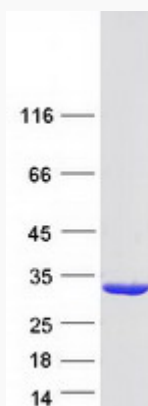
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**Protein Refseq** NP\_000842

**MIM** 138385

**UniProt ID** P46439

**SDS-PAGE**



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