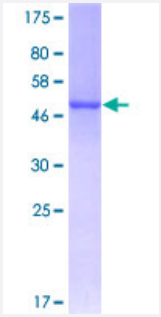
Full-Length

# GSTM5 (Human) Recombinant Protein (P01)

Catalog # H00002949-P01 Size 25 ug, 10 ug

## Applications




## Specification

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|---|---|
| **Product Description** | Human GSTM5 full-length ORF ( NP_000842.2, 1 a.a. - 218 a.a.) recombinant protein with GST-tag at N-terminal. |
| **Sequence** | MPMTLGYWDIRGLAHAIRLLLEYTDSSYVEKKYTLGDAPDYDRSQWLNEKFKLGLDFPNLPYLIDG AHKITQSNAILRYIARKHNLCGETEEEKIRVDILENQVMDNHMELVRLCYDPDFEKLKPKYLEELPE KLKLYSEFLGKRPWFAGDKITFVDFLAYDVLDMKRIFEPKCLDAFLNLKDFISRFEGLKKISAYMKS SQFLRGLLFGKSATWNSK |
| **Host** | Wheat Germ (in vitro) |
| **Theoretical MW (kDa)** | 52.1 |
| **Preparation Method** | *in vitro* wheat germ expression system |
| **Purification** | Glutathione Sepharose 4 Fast Flow |
| **Quality Control Testing** | 12.5% SDS-PAGE Stained with Coomassie Blue. |
| **Storage Buffer** | 50 mM Tris-HCl, 10 mM reduced Glutathione, pH=8.0 in the elution buffer. |
| **Storage Instruction** | Store at -80°C. Aliquot to avoid repeated freezing and thawing. |
| **Note** | Best use within three months from the date of receipt of this protein. |

## Applications

- Enzyme-linked Immunoabsorbent Assay
- Western Blot (Recombinant protein)
- Antibody Production
- Protein Array

## Gene Info — GSTM5

| | |
|---|---|
| **Entrez GeneID** | 2949 |
| **GeneBank Accession#** | NM_000851.2 |
| **Protein Accession#** | NP_000842.2 |
| **Gene Name** | GSTM5 |
| **Gene Alias** | GSTM5-5, GTM5 |
| **Gene Description** | glutathione S-transferase mu 5 |
| **Omim ID** | 138385 |
| **Gene Ontology** | Hyperlink |
| **Gene Summary** | Cytosolic and membrane-bound forms of glutathione S-transferase are encoded by two distinct s upergene families. At present, eight distinct classes of the soluble cytoplasmic mammalian glutath ione S-transferases have been identified: alpha, kappa, mu, omega, pi, sigma, theta and zeta. Thi s gene encodes a glutathione S-transferase that belongs to the mu class. The mu class of enzyme s functions in the detoxification of electrophilic compounds, including carcinogens, therapeutic dru gs, environmental toxins and products of oxidative stress, by conjugation with glutathione. The gen es encoding the mu class of enzymes are organized in a gene cluster on chromosome 1p13.3 an d are known to be highly polymorphic. These genetic variations can change an individual's suscep tibility to carcinogens and toxins as well as affect the toxicity and efficacy of certain drugs. Diversif ication 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. [provid ed by RefSeq |
| **Other Designations** | GST class-mu 5\|OTTHUMP00000013359\|S-(hydroxyalkyl)glutathione lyase M5\|glutathione S-alkyl transferase M5\|glutathione S-aralkyltransferase M5\|glutathione S-aryltransferase M5\|glutathione S -transferase M5 |

## Pathway

- Drug metabolism - cytochrome P450
- Glutathione metabolism
- Metabolism of xenobiotics by cytochrome P450

## Disease

- Alzheimer disease
- Breast Neoplasms
- Cognition
- Coronary Artery Disease
- Coronary Disease
- Genetic Predisposition to Disease
- Head and Neck Neoplasms
- Hypertension
- Lung Neoplasms
- Neoplasm Recurrence
- Neoplasms
- Prenatal Exposure Delayed Effects