# **Elabscience**®

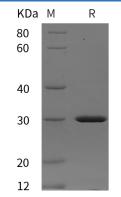
## Recombinant Human GSTM2/GST4 protein (His Tag)

### Catalog Number: PDEH100933

Note: Centrifuge before opening to ensure complete recovery of vial contents.

| Description    |  |
|----------------|--|
| Species        | Human  |
| Source         | E.coli-derived Human GSTM2 protein Met1-Lys218, with an N-terminal His   |
| Calculated MW  | 23.9 kDa   |
| Observed MW    | 30 kDa   |
| Accession      | P28161   |
| Bio-activity   | Not validated for activity   |
| Properties     |  |
| Purity         | >95% as determined by reducing SDS-PAGE.   |
| Endotoxin      | < 10 EU/mg of the protein as determined by the LAL method  |
| Storage        | Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80   |
|                | °C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at $< -20$ °C for 3 months. |
| Shipping       | This product is provided as lyophilized powder which is shipped with ice packs.  |
| Formulation    | Lyophilized from a 0.2 $\mu$ m filtered solution in PBS with 5% Trehalose and 5%   |
|                | Mannitol.  |
| Reconstitution | It is recommended that sterile water be added to the vial to prepare a stock solution of   |
|                | 0.5 mg/mL. Concentration is measured by UV-Vis.  |

#### Data



> 95 % as determined by reducing SDS-PAGE.

#### Background

Glutathione S-transferase Mu 2, also known as GST class-mu 2, GSTM2-2 and GSTM2, is a cytoplasm protein which belongs to the GST superfamily and Mu family. GSTM2 / GST4 contains one&nbsp,GST C-terminal domain and one& nbsp,GST N-terminal domain. The glutathione S-transferases (GSTs) are a multigene family of enzymes largely involved in the detoxification of chemicals. Eight distinct classes of the soluble cytoplasmic mammalian glutathione S-transferases have been identified: alpha, kappa, mu, omega, pi, sigma, theta and zeta.&nbsp,Butyrate, an important luminal component produced from fermentation of dietary fibers, is an efficient inducer of GSTs and especially of GSTM2. Butyrate may act chemoprotectively by increasing detoxification capabilities in the colon mucosa.