



# Recombinant Human Glutathione S-transferase Mu 1 (GSTM1)

<b>Product Code</b>	CSB-EP009979HU-B
<b>Storage</b>	Store at -20°C, for extended storage, conserve at -20°C or -80°C.
<b>Uniprot No.</b>	P09488
<b>Product Type</b>	Recombinant Protein
<b>Immunogen Species</b>	Homo sapiens (Human)
<b>Purity</b>	>85% (SDS-PAGE)
<b>Sequence</b>	MPMILGYWDIRGLAHAIRLLLE YTDSSYEEKKYTMGDAPDYDRSQWLNEKFKL GLDFPNL PYLIDGAHKITQSNAILCYIARKHNLCGETEEEEKIRVDILENQTMDNMQMLGMIC YNPEF EKLKPKYLEELPEKLLKLYSEFLGKRPWFAGNKGLEKISAYMKSSRFLPRPVFSK MAVWGN K
<b>Source</b>	E.coli
<b>Target Names</b>	GSTM1
<b>Protein Names</b>	Recommended name: Glutathione S-transferase Mu 1 EC= 2.5.1.18 Alternative name(s): GST HB subunit 4 GST class-mu 1 GSTM1-1 GSTM1a-1a GSTM1b-1b GTH4
<b>Expression Region</b>	1-181
<b>Notes</b>	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
<b>Tag Info</b>	Tag type will be determined during the manufacturing process.
<b>Protein Length</b>	Full length protein of Isoform 2
<b>Target Details</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.



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**Reconstitution**

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

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**Shelf Life**

The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.