

## Recombinant Mouse Ggt1 protein, His & T7-tagged

**Cat. No.** Ggt1-6880M    **Lot. No.** (See product label)

### SPECIFICATION

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
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| <b>Product Overview</b> | Recombinant Mouse Ggt1 aa. (Asn296~Pro537 (Accession # Q60928)) fused with N-terminal His & T7 tag was produced in E. coli cells.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Species</b>          | Mouse                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Source</b>           | E.coli                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>ProteinLength</b>    | Asn296~Pro537                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Description</b>      | <p>This gene encodes gamma-glutamyl transpeptidase, a plasmamembrane-associated enzyme that cleaves the peptide bond between gamma-glutamyl and cysteinyl glycine moieties of glutathione. The encoded protein is autocatalytically processed to generate an enzymatically active heterodimer comprised of heavy and light chains. Mice lacking the encoded protein grow slowly, develop cataracts and have elevated levels of glutathione in plasma and urine. Transgenic overexpression of the encoded protein in mice enhances osteoclastic bone resorption. The mutant alleles termed 'Dwarf grey' and 'Dwarf grey Bayer' in mice are associated with deletions in this gene. A gamma-glutamyl transpeptidase paralog is located adjacent to this gene. Alternative splicing results in multiple transcript variants. Additional transcripts using alternate promoters and differing in 5' UTRs have been described.</p> |
| <b>Form</b>             | Freeze-dried powder                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Molecular Mass</b>   | Predicted Molecular Mass: 30.3kDa.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |

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|                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Endotoxin</b>      | <1.0EU per 1ug (determined by the LAL method)                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Purity</b>         | >95%                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Characteristic</b> | The isoelectric point is 6.9.                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Applications</b>   | SDS-PAGE; WB; ELISA; IP.                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Stability</b>      | The thermal stability is described by the loss rate of the target protein. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37°C for 48h, and no obvious degradation and precipitation were observed. (Referring from China Biological Products Standard, which was calculated by the Arrhenius equation.) The loss of this protein is less than 5% within the expiration date under appropriate storage condition. |
| <b>Storage</b>        | Avoid repeated freeze/thaw cycles. Store at 2-8°C for one month. Aliquot and store at -80°C for 12 months.                                                                                                                                                                                                                                                                                                                                                                |
| <b>Storage buffer</b> | Supplied as lyophilized form in PBS, pH7.4, containing 5% trehalose, 0.01% sarcosyl.                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Reconstitution</b> | Reconstitute in sterile PBS, pH7.2-pH7.4.                                                                                                                                                                                                                                                                                                                                                                                                                                 |

## GENE INFORMATION

|                        |                                                                                                                        |
|------------------------|------------------------------------------------------------------------------------------------------------------------|
| <b>Gene Name</b>       | Ggt1 gamma-glutamyltransferase 1 [ <i>Mus musculus</i> (house mouse) ]                                                 |
| <b>Official Symbol</b> | Ggt1                                                                                                                   |
| <b>Synonyms</b>        | GGT; dwg; Ggtp; CD224; GGT 1; GGT-1; glutathione hydrolase 1; leukotriene-C4 hydrolase; gamma-glutamyltranspeptidase 1 |

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|----------------|----------------|
| Gene ID        | 14598          |
| mRNA Refseq    | NM_001305992.1 |
| Protein Refseq | NP_001292921.1 |
| UniProt ID     | Q60928         |

#### SDS-PAGE

