

## Active Recombinant Mouse Gsta1 protein, His-tagged

**Cat. No.** Gsta1-27M    **Lot. No.** (See product label)

### SPECIFICATION

|                         |                                                                                                                                                                                                                                                                                                                                                                 |
|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product Overview</b> | Recombinant Mouse Gsta1(1-223aa) fused with His tag at N-terminal was expressed in E. coli.                                                                                                                                                                                                                                                                     |
| <b>Species</b>          | Mouse                                                                                                                                                                                                                                                                                                                                                           |
| <b>Source</b>           | E.coli                                                                                                                                                                                                                                                                                                                                                          |
| <b>ProteinLength</b>    | 1-223 a.a.                                                                                                                                                                                                                                                                                                                                                      |
| <b>Description</b>      | Gsta1 also known as Glutathione S-transferase, A1, belongs to a glutathione S-transferase alpha class and is the most abundantly expressed in liver. This protein functions in the detoxification of electrophilic compounds, including carcinogens, therapeutic drugs, environmental toxins and products of oxidative stress, by conjugation with glutathione. |
| <b>Form</b>             | Liquid, In Phosphate buffered saline (pH7.4) containing 10% glycerol, 1mM DTT                                                                                                                                                                                                                                                                                   |
| <b>Bio-activity</b>     | Specific activity is > 4,000 pmol/min/ug, and is defined as the amount of enzyme that conjugate 1.0 pmole of 1-chloro-2,4-dinitrobenzene (CDNB) with reduced glutathione per minute at pH 6.5 at 25C.                                                                                                                                                           |
| <b>Molecular Mass</b>   | 28kDa (246aa) confirmed by MALDI-TOF                                                                                                                                                                                                                                                                                                                            |
| <b>AA Sequence</b>      | MGSSHHHHHH SSGLVPRGSH MGSMAGKPV L HYFNARGRME CIRWLLAAAG<br>VEFEEKFIQS PEDLEKLKGD GNL MFDQVPM VEIDGMKLAQTRAILNYIAT                                                                                                                                                                                                                                               |

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KYDLYGKDMK ERALIDMYSE GILDLTEMIG QLVLCPPDQR EAKTALAKDR  
TKNRYLPAFE KVLKSHGQDY LVGNRLTRVDIHLLEVLLYV EEFDASLLTP  
FPLLKAFKSR ISSLPNVKKF LQPGSQRKPP MDAKQIQEAR KAFKIQ

**Purity** > 95% by SDS - PAGE

**Storage** Can be stored at +4 centigrade short term (1-2 weeks). For long term storage, aliquot and store at -20 centigrade or -70 centigrade. Avoid repeated freezing and thawing cycles.

**Concentration** 1mg/ml (determined by Bradford assay)

## GENE INFORMATION

**Gene Name** [Gsta1 glutathione S-transferase, alpha 1 \(Ya\) \[ Mus musculus \]](#)

**Official Symbol** [Gsta1](#)

**Synonyms** GSTA1; glutathione S-transferase, alpha 1 (Ya); glutathione S-transferase A1; GST class-alpha member 1; glutathione S-transferase Ya; glutathione S-transferase Ya1; Gst2-1; OTTMUSG00000031890;

**Gene ID** [14857](#)

**mRNA Refseq** [NM\\_008181](#)

**Protein Refseq** [NP\\_032207](#)

**MIM**

**UniProt ID**

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|----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Chromosome Location</b> | 9 E1; 9 43.65 cM                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Pathway</b>             | Drug metabolism - cytochrome P450, organism-specific biosystem; Drug metabolism - cytochrome P450, conserved biosystem; Estrogen metabolism, organism-specific biosystem; Glutathione metabolism, organism-specific biosystem; Glutathione metabolism, organism-specific biosystem; Glutathione metabolism, conserved biosystem; Metabolism of xenobiotics by cytochrome P450, organism-specific biosystem; |
| <b>Function</b>            | drug binding; glutathione binding; glutathione transferase activity; glutathione transferase activity; transferase activity;                                                                                                                                                                                                                                                                                |

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