

## Active Recombinant Mouse Gzmb Protein (227 aa)

**Cat. No.** Gzmb-273G    **Lot. No.** (See product label)

### SPECIFICATION

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product Overview</b> | Recombinant Mouse Granzyme B produced in CHO cells is a polypeptide chain containing 227 amino acids. A fully biologically active molecule, rmGranzyme B has a molecular mass of 32 kDa analyzed by reducing SDS-PAGE and is obtained by chromatographic techniques.                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Species</b>          | Mouse                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Source</b>           | CHO                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>ProteinLength</b>    | 227                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Description</b>      | Granzyme B is a serine protease most commonly found in the granules of cytotoxic lymphocytes (CTLs), natural killer cells (NK cells) and cytotoxic T cells. It is secreted by these cells along with the pore forming protein perforin to mediate apoptosis in target cells. Granzyme B has also recently been found to be produced by a wide range of non-cytotoxic cells ranging from basophils and mast cells to smooth muscle cells. The secondary functions of granzyme B are also numerous. Granzyme B has been shown to be involved in inducing inflammation by stimulating cytokine release and is also involved in extracellular matrix remodeling. |
| <b>Form</b>             | Sterile Filtered White lyophilized (freeze-dried) powder.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Bio-activity</b>     | Measured by its ability to cleave a chromogenic peptide substrate (Ac-IEPD-pNA), the specific activity is greater than 1000 nM/min per µg of enzyme.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |

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|-----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Molecular Mass</b> | 32 kDa, observed by reducing SDS-PAGE.                                                                                                                                                                                                              |
| <b>AA Sequence</b>    | IIGGHEVKPHSRPYMALLSIKDQQPEAICGGFLIREDFVLTAAHCEGSIINVTLGAHNIK<br>EQEKTQQVIPMVKCIHPDPYNPKTFSNDIMLLKLKSKAKRTRAVRPLNLP RRNVNVK<br>PGDVCYVAGWGRMAPMGKYSNTLQEVELTVQKDRECESYFKNRYNKTNQICAGD<br>PKTKRASFRGDSGGPLVCKKVAAGIVSYGYKDGSPPRRAFTKVSSFLSWIKKTMKSS   |
| <b>Endotoxin</b>      | < 0.2 EU/μg, determined by LAL method.                                                                                                                                                                                                              |
| <b>Purity</b>         | > 98% as analyzed by SDS-PAGE.                                                                                                                                                                                                                      |
| <b>Storage</b>        | Lyophilized recombinant Mouse Granzyme B remains stable up to 6 months at -80 centigrade from date of receipt. Upon reconstitution, recombinant Mouse Granzyme B should be stable up to 1 week at 4 centigrade or up to 2 months at -20 centigrade. |
| <b>Storage Buffer</b> | Lyophilized after extensive dialysis against PBS.                                                                                                                                                                                                   |
| <b>Reconstitution</b> | Reconstituted in ddH <sub>2</sub> O or PBS at 100 μg/mL.                                                                                                                                                                                            |

## GENE INFORMATION

|                        |                                                                                                                            |
|------------------------|----------------------------------------------------------------------------------------------------------------------------|
| <b>Gene Name</b>       | Gzmb granzyme B [ <i>Mus musculus</i> ]                                                                                    |
| <b>Official Symbol</b> | Gzmb                                                                                                                       |
| <b>Synonyms</b>        | GZMB; granzyme B; granzyme B(G,H); fragmentin-2; cytotoxic cell protease 1; GZB; CCP1; Ctla1; Ctla-1; AI553453; CCP-1/C11; |
| <b>Gene ID</b>         | 14939                                                                                                                      |
| <b>mRNA Refseq</b>     | NM_013542                                                                                                                  |

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| Protein Refseq | NP_038570 |
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| UniProt ID | P04187 |
|------------|--------|

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