

## Active Recombinant Mouse Granzyme G, His-tagged

Cat. No. Gzmg-1968M Lot. No. (See product label)

### SPECIFICATION

<b>Product Overview</b>	Recombinant Mouse Gzmg protein was expressed in <i>Spodoptera frugiperda</i> . Ile21-Leu248, with a C-terminal 10-His tag.
<b>Species</b>	Mouse
<b>Source</b>	<i>S. frugiperda</i>
<b>Protein Length</b>	21-248 a.a.
<b>Description</b>	<p>Gzmg is a member of the Granzyme family of the serine proteases found specifically in the cytotoxic granules of cytotoxic T lymphocytes (CTL) and natural killer (NK) cells. Together with Gzmg, E and F, it is regulated through pregnancy and by IL-2 and IL-15 in granulated metrial gland cells. Human or rat counterpart of mouse Gzmg has not been found. Like other Granzymes, mouse Gzmg is not secreted as a zymogen but stored as a fully processed and activated enzyme in the cytoplasmic granules of CTL. It is synthesized as a 248 amino acid precursor with a 18 amino acid signal peptide and a 2 amino acid propeptide. The mature protein (residues 21-248) is expressed and purified.</p>
<b>Form</b>	Supplied as a 0.2 unfiltered solution in Tris and NaCl.
<b>N-terminal Sequence</b>	Ile21
<b>Molecular Weight</b>	27 kDa

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<b>Activity</b>	Measured by its ability to cleave a peptide substrate, Succinyl-Phe-Leu-Phe-ThioBenzylester (Suc-FLF-SBzl), in the presence of 5, 5'-Dithiobis (2-nitrobenzoic acid)(DTNB). The specific activity is > 150 pmoles/min/μg, as measured under the described conditions.
<b>Endotoxin Level</b>	<1.0EU per 1μg of the protein by the LAL method.
<b>SDS-PAGE</b>	35 kDa, reducing conditions.
<b>Purity</b>	>95%, by SDS-PAGE under reducing conditions and visualized by silver stain.
<b>Storage</b>	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. 6 months from date of receipt, -20 to -70°C as supplied. 3 months, -20 to -70°C under sterile conditions after opening.

## GENE INFORMATION

<b>Gene Name</b>	Gzmg granzyme G [ <i>Mus musculus</i> ]
<b>Official Symbol</b>	Gzmg
<b>Synonyms</b>	Gzmg; granzyme G; Ctla7; Ctla-7; MCSP-1; AKA granzyme G; CTL serine protease 1; CTL serine protease 3
<b>Gene ID</b>	14944
<b>mRNA Refseq</b>	NM_010375
<b>Protein Refseq</b>	NP_034505
<b>UniProt ID</b>	P13366

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**Chromosome  
Location**

14

**Pathway**

Activation;Apoptosis; Intrinsic Pathway for Apoptosis

**Function**

catalytic activity;hydrolase activity; peptidase activity; serine-type endopeptidase activity;serine-type peptidase activity

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