

Active Recombinant Mouse Granzyme G, His-tagged

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

SPECIFICATION

Product Overview	Recombinant Mouse Gzmg protein was expressed in <i>Spodoptera frugiperda</i> . Ile21-Leu248, with a C-terminal 10-His tag.
Species	Mouse
Source	<i>S. frugiperda</i>
Protein Length	21-248 a.a.
Description	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.
Form	Supplied as a 0.2 umfiltered solution in Tris and NaCl.
N-terminal Sequence	Ile21
Molecular Weight	27 kDa

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

Activity	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.
Endotoxin Level	<1.0EU per 1μg of the protein by the LAL method.
SDS-PAGE	35 kDa, reducing conditions.
Purity	>95%, by SDS-PAGE under reducing conditions and visualized by silver stain.
Storage	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

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

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

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

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA