

## TECHNICAL DATA SHEET

# Recombinant Mouse Granzyme B (Carrier-Free)

Catalog Number: 21-9094

## RPx-Pro™ Recombinant Protein

### PRODUCT INFORMATION

#### CONTENTS

Recombinant Mouse Granzyme B (Carrier-Free)

#### DESCRIPTION

Granzyme B is a cysteine protease found in the cytoplasmic granules of cytolytic T lymphocytes (CTL) and natural killer (NK) cells. Granzyme B is required for the induction of target cell lysis, which occurs as part of cell-mediated immune responses, and can activate apoptosis in target cells by both caspase-dependent and caspase-independent mechanisms. Recombinant Mouse Granzyme B is a glycosylated 227 amino acid protein, comprising the mature active portion of the Mouse Granzyme B precursor.

#### MOLECULAR MASS

The apparent molecular weight is 28.9 kDa by mass spectrometry.

#### AMINO ACID SEQUENCE

IIGGHEVKPH SRPYMALLSI KDQQPEAICG GFLIREDFVL TAAHCEGSII NVTLGAHNIK EQEKTQQVIP MVKCIHPDY NPKTFSNDIM LLKLKSKAKR  
TRAVRPLNLP RRNVNVKPGD VCYVAGWGRM APMGKYSNTL QEVELTVQKD RECESYFKNR YNKTNQICAG DPKTKRASFR GDSGGPLVCK  
KVAAGIVSYG YKDGSPPRAF TKVSSFLSWI KKTMKSS

#### SOURCE

Baculovirus

#### APPLICATIONS

Bioassay

#### PURITY

98 %

#### STORAGE

-20°C

#### PROTEIN CONTENT

Content Verified by UV Spectroscopy and/or SDS-PAGE gel.

#### ENDOTOXIN LEVEL

Endotoxin level is <0.1 ng/μg of protein (<1EU/μg).

#### AUTHENTICITY

Verified by N-terminal and Mass Spectrometry analyses (when applicable).

#### CROSS REACTIVITY

Mouse

#### BIOACTIVITY

Determined by its ability to cleave a synthetic chromogenic Granzyme B substrate. The expected specific activity, when using the Ac-IEPD-pNA substrate at 25°C, is greater than 750 nM/min per μg of enzyme.

#### RESEARCH AREAS

Immune System, Transplantation, Inflammation, Apoptosis

#### RECONSTITUTION

See Certificate of Analysis (COA) for lot specific reconstitution information.

#### REFERENCES

Gu, H. Gambogic acid induced tumor cell apoptosis by T lymphocyte activation in H22 transplanted mice. 2008. International Immunopharmacology; (11):1493-502.

Citations are provided as a resource for additional applications that have not been validated by Tonbo Biosciences. Please choose the appropriate format for each application and consult Materials and Methods sections for additional details about the use of any product in these publications.

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