

## DATASHEET

Version 20181206

# Granzyme B, Mouse

**Cat. No.:** Z03239-10

**Size:** 10.0 ug

**Synonyms:** Granzyme B, Mouse

### Description:

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.

Recombinant Mouse Granzyme B produced in *CHO* cells is a polypeptide chain containing 227 amino acids. A fully biologically active molecule, rm-Granzyme B has a molecular mass of 32 kDa analyzed by reducing SDS-PAGE and is obtained by chromatographic techniques at GenScript.

### Amino Acid Sequence:

```
00001 IIGGHEVKPH SRPYMALLSI KDQQPEAICG GFLIREDFVL
00041 TAAHCEGSII NVTLAGAHNIK EQEKTQQVIP MVKCIHPDPY
00081 NPKTFSNDIM LLKLKSKAKR TRAVRPLNLP RRNVNVKPGD
00121 VCYVAGWGRM APMGKYSNTL QEVELTVQKD RECESYFKNR
00161 YNKTNQICAG DPKTKRASFR GDSGGPLVCK KVAAGIVSYG
00201 YKDGSPPRAF TKVSSFLSWI KKTMKSS
```

**Source:** *CHO*

**Species:** Mouse

**Biological Activity:** 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.

**Molecular Weight:** 32 kDa, observed by reducing SDS-PAGE.

**Formulation:** Lyophilized after extensive dialysis against PBS.

**Reconstitution:** Reconstituted in ddH<sub>2</sub>O or PBS at 100 µg/ml.

**Purity:** > 98% as analyzed by SDS-PAGE.

**Endotoxin Level:** < 0.2 EU/µg, determined by LAL method.

**Storage:** Lyophilized recombinant Mouse Granzyme B remains stable up to 6 months at lower than -70°C from date of receipt. Upon reconstitution, recombinant Mouse Granzyme B should be stable up to 1 week at 4°C or up to 2 months at -20°C.