

PRODUCT DATA SHEET



Bioworld Technology, Inc.

Recombinant Granzyme B, Mouse

Catalog Number: BK0214-1mg

Source: CHO

Quantity: 1mg

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, rmGranzyme B has a molecular mass of 32 kDa analyzed by reducing SDS-PAGE and is obtained by chromatographic techniques at GenScript.

Molecular Weight:

32 kDa, observed by reducing SDS-PAGE.

Purity:

> 98% as analyzed by SDS-PAGE.

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.

Physical Appearance:

Sterile Filtered White lyophilized (freeze-dried) powder.

Formulation:

Lyophilized after extensive dialysis against PBS.

AA Sequence:

IIGGHEVKPHSRPYMALLSIK-
SIK-
DQQPEAICGGFLIREDFVLTAAHCEGSIINVTL-
GAHNIKEQEKTTQQVIPMVKCI-
PHPDYNPKTFSNDIMLLKLLK-
SKAKRTRAVRPLNLP RRNVNVKPGDVCYVAG-
WGRMAPMGKYSNTLQEVLT VQKDRE-
CESYFKNRYNKTNQICAGDPKTKRAS-
FRGDSGGPLVCKKVAAGIVSYGYKDG-
SPPRAFTKVSSFLSWIKKTMKSS

Endotoxin:

< 0.2 EU/µg, determined by LAL method.

Reconstitution:

Reconstituted in ddH₂O or PBS at 100 µg/ml.

Storage:

Lyophilized recombinant Mouse Granzyme B remains stable up to 6 months at -80 °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.

Usage:

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