

Granzyme B from Mouse, Recombinant

Cat. No. NATE-0333

Lot. No. (See product label)

Introduction

Description Granzyme B, a 247 amino acid polypeptide, contains a leader sequence, which is cleaved by a signal peptidase and a two amino acid prodomain, which is cleaved by the lysosomal cysteine protease DPPI. The recombinant granzyme B is expressed in *Pichia pastoris* as the mature form and appears on SDS-PAGE as a triplet (~34, 32, and 30 kDa) due to three different glycosylations. Granzyme B, a serine protease, is the most prominent granzyme in a family of 11 found in the cytotoxic granules. The granzymes enter the target cell with the assistance of perforin, a critical molecule of the cytotoxic granules. In the target cell, the granzymes act on specific substrates involved with the cell death via apoptosis.

Synonyms granzyme B; CTLA1; CCPII; cytotoxic cell proteinase-1; granzyme G; granzyme H; CCP1 proteinase; GzmB

Product Information

Species Mouse

Source *Pichia pastoris*

Form buffered aqueous solution

CAS No. 143180-74-9

Molecular Weight 28.9 kDa

Activity > 10,000 units/mg protein

Specificity > 90% (SDS-PAGE)

Pathway Activation, myristoylation of BID and translocation to mitochondria, organism-specific biosystem; Allograft rejection, organism-specific biosystem; Allograft rejection, conserved biosystem; Apoptosis, organism-specific biosystem; Apoptosis, organism-specific biosystem; Autoimmune thyroid disease, organism-specific biosystem; Autoimmune thyroid disease, conserved biosystem

Function catalytic activity; hydrolase activity; peptidase activity; protein binding; serine-type endopeptidase activity; serine-type peptidase activity

Unit Definition One unit will hydrolyze 1.0 nmole of Boc-Ala-Ala-Asp-sBzl per min at 30°C.

Storage and Shipping Information

Storage -70°C