Creative Enzymes®

Native Papaya latex Chymopapain

Cat. No. NATE-0133

Lot. No. (See product label)

Introduction

Description	Chymopapain is a proteolytic enzyme isolated from the latex of papaya (Carica papaya). It is a medication used to treat herniated lower lumbar discs in the spine. Chymopapain injections are normally given under local, Rather than general, anaesthesia. The dose for a single intervertebral disc is 2 to 4 nanokatals, with a maximum dose per patient of 8 nanokatals. The procedure is referred to as chemonucleolysis.
Applications	Chymopapain from papaya latex has been used in a study to assess the anthelmintic effect of natural plant cysteine proteinases against the gastrointestinal nematode, Heligmosomoides. Chymopapain from papaya latex has also been used in a study to investigate the preparation and identification of the rabbit's antibody of chymopapain. The enzyme has been used to detach cultured CD34+ cells from beads (130 units/mL for 2 minutes, repeated three times). Chymopapain and pronase have been found to be effective in the digestion of human intestinal tissue. The enzyme has been used along with pronase, collagenase, elastase, DNAse, and catalase for rabbit lung cells digestion at a concentration of 0.05% in calcium-magnesium-free Kreb's serum substitute. It has also been used for the release of neuroblastoma cells from marrow bound to antibody-coated microspheres.
Synonyms	chymopapain A; chymopapain B; chymopapain S; EC 3.4.22.6; 9001-09-6; Chymodiactin

Product Information

Source	Papaya latex
Form	lyophilized powder
EC Number	EC 3.4.22.6
CAS No.	9001-09-6
Activity	> 2.0 units/mg protein
Composition	Protein, > 75% E1%/280
Unit Definition	One unit will hydrolyze 1.0 μmole of BAEE to Nα-benzoyl-L-arginine per min at pH 6.2 at 25°C

Storage and Shipping Information

Storage	−20°C