Creative Enzymes®

Native Pineapple Bromelain

Cat. No. NATE-0665

Lot. No. (See product label)

Introduction

Description	Bromelain is a cysteine endopeptidase with broad specificity for cleavage of proteins. Bromelain may be from a stem or piece of fruit. Stem bromelain (SBM) (EC 3.4.22.32), a proteolytic enzyme, is a widely accepted phytotherapeutical drug member of the bromelain family of proteolytic enzymes obtained from Ananas comosus. Some of the therapeutic benefits of SBM are reversible inhibition of platelet aggregation, angina pectoris, bronchitis, sinusitis, surgical traumas, thrombophlebitis, pyelonephritis and enhanced absorption of drugs, particularly of antibiotics. Its anti-metastasis and anti-inflammatory activities are apparently independent of its proteolytic activity.
Applications	Bromelain may be used to inhibit the biosysnthesis of proinflammatory prostaglandins. It may be used to reduce clotting efficiency. Bromelain, from pineapple stem, has been used to make enzymatic hydrolysates of honeybee-collected pollen.
Synonyms	stem bromelain; EC 3.4.22.32; 37189-34-7; bromelain; pineapple stem bromelain; SBM

Product Information

Species	Pineapple
Source	Pineapple stem
Form	Lyophilized powder containing mannitol and potassium phosphate buffer salts
EC Number	EC 3.4.22.32
CAS No.	37189-34-7
Activity	> 3 units/mg protein; 5-15 units/mg protein
Composition	Protein, > 35% biuret
Buffer	The product may be suspended in acetate buffer, pH 4.5 at 1 mg/mL concentration, yielding a hazy, off-white suspension.
Unit Definition	One unit will release 1.0 micromole of p-nitrophenol from N-alpha-CBZ-L-Lysine p-nitrophenyl ester per minute at pH 4.6 at 25°C. One old titrimetric unit (pH 4.5 at 45°C) is equivalent to approximately 1.7 new units (pH 4.6 at 25°C).