

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 biosynthesis 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).