Creative Enzymes®

Native Streptomyces griseus Chitosanase

Cat. No. NATE-0125

Lot. No. (See product label)

Introduction

Description	Chitosanase catalyzes the endohydrolysis of β (1,4) linkages between N-acetyl-D-glucosamine and D-glucosamine residues in partially deacetylated chitosan. Chitosanase from Streptomyces griseus is capable of hydrolyzing both chitosan and carboxymethyl cellulose. It is used for the lysis of cell walls of fungi belonging to the group Mucorales. It is found in several types of microorganisms.
Applications	Chitosanase from Streptomyces griseus has been used in a study to assess the effect of chitin sources on production of chitinase and chitosanase. Chitosanase from Streptomyces griseus has also been used in a study to investigate the effective production of chitinase and chitosanase by Streptomyces griseus HUT 6037 using colloidal chitin and various degrees of deacetylation of chitosan. The enzyme from Creative Enzymes has been used for the hydrolysis of the crude cell wall preparation of oomycete Aphanomyces euteiches, a major parasite of legume plants. It has also been used for the enzymatic hydrolysis of the fully de-N-acetylated chitosan to get chitosan oligomer mixtures during the preparation of biocompatible chitosan-alginate gel.
Synonyms	Chitosanase; EC 3.2.1.132; 51570-20-8; Chitosan N-acetylglucosaminohydrolase

Product Information

Source	Streptomyces griseus
Form	Lyophilized powder containing potassium phosphate buffer salts
EC Number	EC 3.2.1.132
CAS No.	51570-20-8
Activity	>50 units/mg protein (Bradford)
Buffer	H2O: soluble , clear to slightly hazy, colorless (10U/0.3mL)
Unit Definition	One unit will release 1 µmole of glucosamine from chitosan per min at pH 5.0 at 37°C as measured in the fluorimetric assay of Osswald, et al. (1992).

Storage and Shipping Information

Storage	−20°C