

Native *Trichoderma viride* Chitinase

Cat. No. NATE-0124

Lot. No. (See product label)

Introduction

Description Chitinase is an extracellular enzyme complex that degrades chitin and has a molecular mass of approximately 30 kDa. Chitin is degraded to N-acetyl-D-glucosamine in 2 enzymatic reactions. Firstly, chitobiose units are removed from chitin by chitodextrinase-chitinase. The second reaction involves N-acetyl-glucosaminidase-chitobiase, which cleaves the disaccharide to its monomer subunits (that comprise of N-acetyl-D-glucosamine).

Applications Chitinase from *Trichoderma viride* has been used in a study to investigate the differential release of high mannose structural isoforms by fungal and bacterial endo- β -N-acetylglucosaminidases. Chitinase from *Trichoderma viride* has also been used in a study to investigate a hevein-like protein and a class I chitinase with antifungal activity from leaves of the paper mulberry. The enzyme from Creative Enzymes has been used to digest chitin in purified sponge spicules during the study of sponge skeletons.

Synonyms Chitinase; chitodextrinase; 1,4- β -poly-N-acetylglucosaminidase; poly- β -glucosaminidase; β -1,4-poly-N-acetyl glucosaminidase; poly[1,4-(N-acetyl- β -D-glucosaminide)] glycanohydrolase; (1- \rightarrow 4)-2-acetamido-2-deoxy-beta-D-glucan glycanohydrolase; EC 3.2.1.14

Product Information

Source *Trichoderma viride*

Form lyophilized powder.

EC Number EC 3.2.1.14

CAS No. 9001-06-3

Activity > 600 units/g solid

Buffer 0.05 M phosphate buffer, pH 6.0: soluble 0.90-1.10 mg/mL, faintly hazy to hazy (with particles)

Unit Definition One unit will liberate 1.0 mg of N-acetyl-D-glucosamine from chitin per hour at pH 6.0 at 25°C in a 2 hour assay. One new 1 hour unit = approx. 50 old 48 hour units.

Storage and Shipping Information

Storage -20°C