

## Native *Trichoderma longibrachiatum* $\beta$ -Glucanase

Cat. No. NATE-0768

Lot. No. (See product label)

### Introduction

#### Description

$\beta$ -glucanases degrade  $\beta$ -1,4-glucans of cellulose, xyloglucan and  $\beta$ -1,4-xylan.  $\beta$ -Glucanase represents a group of carbohydrate enzymes which break down glycosidic bonds within beta-glucan. It forms the main constituent of fungal cell walls and could be a potential structural and storage polysaccharide of marine macro-algae. It has the ability to degrade fungal cell walls and may be involved in defense mechanism of plants against pathogenic fungi.

#### Applications

$\beta$ -Glucanase was used as a cellulase enzyme in the combined biological and chemical pretreatment method for lignocellulosic ethanol production from energy cane. It was also used in the enzymatic saccharification of cellulose and production of ethanol.

#### Synonyms

endo-1,3- $\beta$ -D-glucanase; laminarinase; laminaranase;  $\beta$ -1,3-glucanase;  $\beta$ -1,3-1,4-glucanase; endo-1,3- $\beta$ -glucanase; endo- $\beta$ -1,3 (4)-glucanase; endo- $\beta$ -1,3-1,4-glucanase; endo- $\beta$ -(1 $\rightarrow$ 3)-D-glucanase; endo-1,3-1,4- $\beta$ -D-glucanase; endo- $\beta$ -(1-3)-D-glucanase; endo- $\beta$ -1,3-glucanase IV; endo-1,3- $\beta$ -D-glucanase; 1,3-(1,3; 1,4)- $\beta$ -D-glucan 3 (4)-glucanohydrolase; EC 3.2.1.6

### Product Information

#### Source

*Trichoderma longibrachiatum*

#### Form

powder. contains maltodextrin, silica and sodium benzoate

#### EC Number

EC 3.2.1.6

#### CAS No.

62213-14-3

#### Unit Definition

One unit will liberate 1.0  $\mu$ mole of glucose from cellulose in one hr at pH 5.0 at 37°C (2 hr incubation time).