Creative Enzymes®

# Lichenase 26A & Cellulase 5E from Clostridium thermocellum, Recombinant

*Cat. No. NATE-1427*

*Lot. No.* (See product label)

## Introduction

***Description*** β-glucanases degrade β-1,4-glucans of cellulose, xyloglucan and β-1,4-xylan. β-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.

***Synonyms*** endo-1,3-β-D-glucanase; laminarinase; laminaranase; β-1,3-glucanase; β-1,3-1,4-glucanase; endo-1,3-β-glucanase; endo-β-1,3 (4)-glucanase; endo-β-1,3-1,4-glucanase; endo-β-(1→3)-D-glucanase; endo-1,3-1,4-β-D-glucanase; endo-β-(1-3)-D-glucanase; endo-β-1,3-glucanase IV; endo-1,3-β-D-glucanase; 1,3-(1,3; 1,4)-β-D-glucan 3 (4)-glucanohydrolase; EC 3.2.1.73

## Product Information

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| ***Species*** | Clostridium thermocellum |
| ***Source*** | E. coli |
| ***Form*** | 35 mM NaHepes buffer, pH 7.5, 750 mM NaCl, 200 mM imidazol, 3.5 mM CaCl2, 0.02% sodium azide and 25% (v/v) glycerol |
| ***EC Number*** | EC 3.2.1.73 & EC 3.2.1.4 |
| ***CAS No.*** | 37288-51-0 |
| ***Molecular Weight*** | 70.4 kDa |
| ***Purity*** | >90% by SDS-PAGE |
| ***Activity*** | 800 U/mg |
| ***Concentration*** | 2 mg/mL |
| ***Optimum pH*** | 5.0-7.0 |
| ***Optimum temperature*** | 60 °C |
| ***Specificity*** | Bi-functional enzyme that hydrolyses mixed 1,3-1,4-β-glucans (GH26) and 1,4-β-glucans (GH5) |

## Storage and Shipping Information

***Storage*** This enzyme is shipped at room temperature but should be stored at -20 °C.