

## Xyloglucanase from *Clostridium thermocellum*, Recombinant

Cat. No. NATE-1235

Lot. No. (See product label)

### Introduction

**Description** In enzymology, a xyloglucan-specific endo-beta-1,4-glucanase (EC 3.2.1.151) is an enzyme that catalyzes the chemical reaction: xyloglucan + H<sub>2</sub>O → xyloglucan oligosaccharides. Thus, the two substrates of this enzyme are xyloglucan and H<sub>2</sub>O, whereas its product is xyloglucan oligosaccharides. This enzyme belongs to the family of hydrolases, specifically those glycosidases that hydrolyse O- and S-glycosyl compounds.

**Synonyms** xyloglucan-specific endo-beta-1,4-glucanase; EC 3.2.1.151; [(1->6)-alpha-D-xylo]-(1->4)-beta-D-glucan glucanohydrolase; XEG; XH; xyloglucan endo-beta-1,4-glucanase; xyloglucanase; xyloglucanendohydrolase; 1,4-beta-D-glucan glucanohydrolase

### Product Information

**Source** Clostridium thermocellum F7/YS

**Form** Supplied in a glycerol solution

**EC Number** EC 3.2.1.151

**Molecular Weight** 82100 Da

**Purity** >95 % as judged by SDS-PAGE

**Activity** 100 U/mg

**Concentration** 175 U/ml

**Optimum pH** 7 (stable from 6 - 8)

**Optimum temperature** 60°C (stable up to 65°C)

**Unit Definition** One unit is defined as the amount of enzyme required to release 1 μmol of glucose-reducing-sugar equivalents per minute from xyloglucan in 50 mM phosphate buffer, pH 6.5, at 60°C.

### Usage and Packaging

**Preparation Instructions** Centrifuge briefly if possible to remove glycerol solution from lid before use.

### Storage and Shipping Information

**Storage** Store at -20°C (shipped at ambient temperature)