

**CHITINASE (*Clostridium thermocellum*)**

08/23

**Recombinant****E-CHITN**

EC: 3.2.1.14

**Synonyms:** chitodextrinase; 1,4- $\beta$ -poly-N-acetylglucosaminidase**CAZy Family:** GH18**CAS:** 9001-06-3**Refer to the product lot number Certificate of Analysis for lot specific properties.****PROPERTIES****1. ELECTROPHORETIC PURITY:**

- Single band on SDS-gel electrophoresis (MW ~ 53,000)
- One major band on isoelectric focusing (pI ~ 5.01)

**2. SPECIFICITY:**

Random hydrolysis of N-acetyl-beta-D-glucosaminide (1-4)-beta-linkages in chitin and chitodextrins.

**3. PHYSICOCHEMICAL PROPERTIES:**

Recommended conditions of use are at pH 5.5-6.5 and up to 40°C

pH Optima: 6.2

pH Stability: 5.5-8.0 (> 75% control activity after 24 h at 4°C)

Temperature Optima: 40°C (10 min reaction)

Temperature Stability: 30°C (> 75% control activity after 15 min incubation at temperature)

**4. STORAGE CONDITIONS:**

The enzyme is supplied as an ammonium sulphate suspension containing 0.02% (w/v) sodium azide and should be stored at 4°C. For assay, this enzyme should be diluted in MES buffer (100 mM), pH 6.2.

**Swirl to mix the enzyme immediately prior to use.**

## 5. EXPERIMENTAL DATA:

