

Chitinase

Cat: C9330

Storage: Store at -20°C, and it is valid for 2 years.

Product Information

CAS: 9001-06-3

English name: Chitinase

Appearance (Character): Light brown to brown crystalline powder.

Solubility: 0.90 - 1.10 mg/mL in water

Protein Content: 88.34%

Enzyme Activity/Potency: ≥200 u/g

Definition of Enzyme Activity: One unit is defined as the amount of enzyme that releases 1.0 mg of N-acetyl-D-glucosamine from chitin per hour under the conditions of pH 6.0 and 25 °C in a 2-hour assay.

Synonyms: Chitodextrinase; Poly(1,4-b-[2-acetamido-2-deoxy-D-glucoside]) glycanohydrolase

Introduction

Chitinase is an extracellular enzyme complex with a molecular weight of approximately 30 kDa. This product is soluble in 50 mM potassium phosphate solution at pH 6.0, with a solubility of \leq 1 mg/ml, and the solution is clear.

The hydrolysis of chitin by chitinase to produce N-acetylglucosamine occurs through two consecutive enzymatic reactions. The first is catalyzed by chitosanase-chitinase, a polysaccharide hydrolase that removes chitobiose from chitin. The second reaction is catalyzed by N-acetylglucosaminidase-chitobiosidase, which cleaves the disaccharide into its monomeric subunit, N-acetylglucosamine (NAGA). The optimal reaction temperature is 37°C.

Note

- 1. Unless otherwise specified, the biochemical reagents produced by our company are generally non-sterile packaged. If they are to be used for cell experiments, please conduct pretreatment in advance.
- 2. Once dissolved, please store the solution in separate containers to avoid product degradation caused by repeated freezing and thawing.
- 3. The product information is for reference only. If you have any questions, please call 400-968-6088 for consultation.
- 4. The products are all for scientific research use only. Do not use it for medical, clinical diagnosis or treatment, food and cosmetics, etc. Do not store them in ordinary residential areas.
- 5. For your safety and health, please wear laboratory clothes, disposable gloves and masks to operate.