

Recombinant Chitosanase

C758701

Storage: Store at -80°C, avoid freeze-thaw cycles.

Introduction:

This product is a high-purity chitosanase obtained through recombinant gene expression and purification. It hydrolyzes the β -1,4-glycosidic bonds in chitosan endolytically, randomly producing chitosan oligosaccharides and monosaccharides. The enzyme is supplied in a storage buffer containing 30% glycerol (50 mM Tris-HCl, pH 7.0), which facilitates long-term storage and prevents activity loss from repeated freeze-thaw cycles.

Usage method:

1. Pre-warm the buffer and substrate solution to the reaction temperature (e.g., 50°C).
2. In a pre-warmed reaction tube, add the buffer, substrate solution, and make-up water sequentially. Mix thoroughly.
3. Initiate the reaction by adding the enzyme solution. Vortex immediately to mix and start the timer.
4. Incubate for a precise period (e.g., 10-30 minutes) at the optimal temperature.
5. Terminate the reaction immediately by placing the tube in a boiling water bath for 5-10 minutes, or by immediately adding an equal volume of DNS reagent for reducing sugar determination.

Precautions:

1. For research use only. Wear lab coats and gloves. Avoid inhalation, ingestion, and contact with skin or eyes.
2. The reaction conditions provided in this manual is general examples. Users are advised to optimize parameters such as pH, temperature, substrate concentration, and reaction time for their specific experimental requirements (e.g., substrate type, degree of polymerization, degree of deacetylation).
3. Use sterile pipette tips to avoid microbial contamination of the enzyme solution.
4. Strictly adhere to the storage condition. Repeated freeze-thaw cycles are a primary cause of enzyme inactivation.