RESEARCH PAPERS

应用固定化里氏木霉在螺旋纤维床生物反应器中连续降解壳聚糖的研究

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摘要 Continuous hydrolysis of chitosan was performed in a convoluted fibrous bed bioreactor (CFBB) with immobilized T. reesei. At dilution rate of 0.4 d-1 and substrate concentration of 2%(mass vs. volume), the average degree of polymerization of hydrolysate can be kept at 1.25-1.35, which can be easily regulated by changing dilution rate or inlet chitosan concentration.

关键词 <u>continuous degradation</u> <u>chitosanase production</u> <u>chitosan degradation</u> <u>fibrous bed</u> <u>bioreactor</u> <u>Trichoderma reesei</u>

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Continuous Degradation of Chitosan in a Convoluted Fibrous Bed Bioreactor with Immobilized Trichoderma reesei

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Abstract Continuous hydrolysis of chitosan was performed in a convoluted fibrous bed bioreactor (CFBB) with immobilized T. reesei. At dilution rate of 0.4 d-1 and substrate concentration of 2%(mass vs. volume), the average degree of polymerization of hydrolysate can be kept at 1.25-1.35, which can be easily regulated by changing dilution rate or inlet chitosan concentration.

Key words continuous degradation; chitosanase production; chitosan degradation; fibrous bed bioreactor; Trichoderma reesei

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