云南大学学报(自然科学版)
JOURNAL OF YUNNAN UNIVERSITY(NATURAL SCIENCES)
中文核心期刊
中国科技核心期刊

云南大学学报(自然科学版) » 2003, Vol. » Issue (1): 81-84 DOI:

木霉No. 183菌株木聚糖酶的研究

解复红, 张克勤, 李文鹏

云南大学, 云南省工业微生物发酵工程重点实验室, 云南, 昆明, 650091

Studies on the crude xylanase produced by *Trichoderma* sp.No.183

XIE Fu-hong, ZHANG Ke-qin, LI Wen-peng

Key Laboratory of Industrial Microbiology & Fermentation Technology of Yunnan, Yunnan University, Kunming 650091, China

全文: PDF (564 KB) HTML (KB) 输出: BibTeX | EndNote (RIS) 背景资料

摘要 筛选到一株木聚糖酶高产木霉菌株(No.183),研究了该菌株产木聚糖酶的液态发酵和粗酶液的酶学性质.结果表明,以麸皮和木聚糖为主要碳源,28℃,190r/min摇瓶培养时,木霉No.183菌株在接种后84h酶活最高,达到298.47U/mL.该木聚糖酶的最适反应温度为50℃,最适pH为该木聚糖酶在pH5～7和40℃以下时相对稳定.Ca^{2+},Zn^{2+}和Cu^{2+}对该木聚糖酶有较强的促进作用,Fe^{3+}和Hg^{2+}对该酶有较强的抑制作用.

关键词： 木聚糖酶 木聚糖 木霉 酶活

Abstract： The enzymological characteristics of crude xylanase produced by *Trichoderma* strain 183 with high xylanase productivity were studied with the following results:cultured on the medium with wheat bran and xylan as the main carbon resource,under 28℃ and 190r/min shaking,the pH and enzyme activity of the broth kept increasing with the growth of strain 183,the enzyme activity reached its peak at hour 84 after inoculation,up to 298.47U/mL.The enzyme has optinal reactive conditions of 50℃ and pH 6,though the enzyme is relatively stable under 40℃ and pH 5～7.Fe^{2+} and Hg^{2+} strongly inhibited the activity of this enzyme,while Zn^{2+},Ca^{2+} and Cu^{2+} evidently promoted the activity.

Key words： xylan xylanase *Trichoderma* enzyme activity

收稿日期: 2002-09-20;

基金资助:云南省科技攻关资助项目(2001GG24).

服务
- 把本文推荐给朋友
- 加入我的书架
- 加入引用管理器
- E-mail Alert
- RSS

作者相关文章
- 解复红
- 张克勤
- 李文鹏

引用本文:

解复红,张克勤,李文鹏. 木霉No.183菌株木聚糖酶的研究[J]. 云南大学学报(自然科学版), 2003, (1): 81-84.

XIE Fu-hong,ZHANG Ke-qin,LI Wen-peng. Studies on the crude xylanase produced by *Trichoderma* sp.No.183[J]. , 2003, (1): 81-84.

没有本文参考文献

没有找到本文相关文献

编辑出版：云南大学学报编辑部 (昆明市翠湖北路2号, 650091)
电话：0871-5033829(传真) 5031498 5031662 E-mail: yndxxb@ynu.edu.cn yndxxb@163.com