

## RESEARCH NOTES

### 凝胶层析法纯化纤维素酶的研究

姚善泾, 关怡新, 俞丽华

Department of Chemical and Biochemical Engineering, Zhejiang University, Hangzhou 310027, China

收稿日期 修回日期 网络版发布日期 接受日期

**摘要** The gel filtration was carried out for purification of cellulase. The influences of chromatographic parameters on the resolution were studied to determine the optimal conditions for purification. The purified endoglucanase was obtained by gel filtration by Superdex 75 prep grade with an activity recovery of 92.8% and the purification factor 4.2. The sample volume should be below 6 % of the column bed volume and the column bed height  $L \geq 12.0$  cm. The optimum catalysis temperature and pH for the enzyme were 55 °C and 4.5-5.0, respectively. The cellulase was stable at pH ranging from 4.0 to 6.0 and temperature below 60 °C.

**关键词** [cellulase](#) [endoglucanase](#) [purification](#) [characterization](#) [gel chromatography](#)

分类号

**DOI:**

### Characterization of Crude Cellulase from *Trichoderma reesei* and Purification of Cellulase

YAO Shanjing, GUAN Yixin, YU Lihua

Department of Chemical and Biochemical Engineering, Zhejiang University, Hangzhou 310027, China

Received Revised Online Accepted

**Abstract** The gel filtration was carried out for purification of cellulase. The influences of chromatographic parameters on the resolution were studied to determine the optimal conditions for purification. The purified endoglucanase was obtained by gel filtration by Superdex 75 prep grade with an activity recovery of 92.8% and the purification factor 4.2. The sample volume should be below 6 % of the column bed volume and the column bed height  $L \geq 12.0$  cm. The optimum catalysis temperature and pH for the enzyme were 55 °C and 4.5-5.0, respectively. The cellulase was stable at pH ranging from 4.0 to 6.0 and temperature below 60 °C.

**Key words** [cellulase](#); [endoglucanase](#); [purification](#); [characterization](#); [gel chromatography](#)

通讯作者:

姚善泾

作者个人主页: 姚善泾; 关怡新; 俞丽华

## 扩展功能

本文信息

▶ [Supporting info](#)

▶ [PDF](#) (856KB)

▶ [\[HTML全文\]](#) (0KB)

▶ [参考文献](#)

服务与反馈

▶ [把本文推荐给朋友](#)

▶ [加入我的书架](#)

▶ [加入引用管理器](#)

▶ [引用本文](#)

▶ [Email Alert](#)

▶ [文章反馈](#)

▶ [浏览反馈信息](#)

相关信息

▶ [本刊中包含“cellulase”的相关文章](#)

▶ 本文作者相关文章

· [姚善泾](#)

· [关怡新](#)

· [俞丽华](#)