

研究简报

## 酶催化-荧光猝灭法测定药物中的万古霉素

冯霞光, 张敏, 赵虎, 王怀友

山东师范大学化学化工与材料科学学院, 济南 250014

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**摘要** 根据万古霉素对产物的荧光具有猝灭作用的原理, 本文研究了万古霉素的荧光猝灭机理, 建立了测定万古霉素的方法. 该方法具有操作简便、快速及选择性好等优点, 可用于注射液中万古霉素含量的测定, 与药典法对照, 结果令人满意.

**关键词** [万古霉素](#) [酪氨酸](#) [辣根过氧化酶](#) [H<sub>2</sub>O<sub>2</sub>](#)-[荧光猝灭](#)

**分类号** [0657.39](#)

## Determination of Vancomycin in Injection *via* Enzyme Catalysis-Fluorescence Quenching Method

FENG Xia-Guang, ZHANG Min, ZHAO Hu, WANG Huai-You\*

College of Chemistry, Chemical Engineering and Materials Science, Shandong Normal University, Jinan 250014, China

**Abstract** A new method for determining vancomycin was established based on the principle of fluorescence quenching. The mechanism of the fluorescence quenching was discussed. A linear relationship is obtained between  $F_0/F$  and the concentration of vancomycin in the range of 4.0—450.0  $\mu\text{g/mL}$  with the correlation coefficient 0.9991. The detection limit was 10.91  $\mu\text{g/mL}$  and the relative standard derivative was 0.70%. The effects of pH, foreign ions, standing time on the determination of vancomycin were examined. The results obtained by this method were agreed with those by the official method.

**Key words** [Vancomycin](#) [Tyrosine](#) [Horseradish peroxidase](#) [H<sub>2</sub>O<sub>2</sub>](#)-[Fluorescence quenching](#)

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通讯作者 王怀友 [wanghuaiyou@sdu.edu.cn](mailto:wanghuaiyou@sdu.edu.cn)

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