

Detection of Staphylococcal Plasmids Involving CCC and OC Forms

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Studies showed that 125 of the total 131 strains of *Staphylococcus aureus* isolated in Nanjing contained plasmid DNA, in which 74.8% of the strains demonstrated at least two plasmid DNA bands in the profiles by the LL method. Two-step agarose gel electrophoresis was employed to detect the CCC and OC plasmid DNA bands. Molecular weights of the CCC plasmid DNA bands were estimated by comparison with those of reference plasmids extracted from *E. coli* V517 using the LL method with modification. Twenty-one plasmid profiles in the strains of *Staphylococcus aureus* were found, in which there were 16 CCC plasmid DNA bands ranging from 1.42 Md to 22.24 ± 0.73 Md. The 2.66 ± 0.06 Md plasmid DNA was detected from 73.3% of the strains. Strains containing 14.88 and 2.66 ± 0.06 Md plasmids were the most encountered (25.2%).

Key words *Staphylococcus aureus*; Plasmid; Agarose gel electrophoresis

应用固定化细胞酶工程技术生产 L-天冬氨酸技术成果通过鉴定

中国药科大学生物化学教研室研究应用固定化细胞酶工程技术生产 L-天冬氨酸获得成功。该工艺的小试技术在中国药科大学制药厂进行了中试放大,并制定了适合连续化工业生产的工艺路线及工艺操作规程。目前已形成了年产 100 吨 L-天冬氨酸的规模。1992 年 3 月 20 日国家医药管理局主持召开了《应用固定化细胞酶工程技术生产 L-天冬氨酸》成果鉴定会,与会专家一致认为该工艺是一项先进的新型生物技术,整个成果数据可靠、工艺合理、经济效益高。该工艺具有稳定、操作简便、成品质量高、原材料国产化等优点,且投资小、成本低、见效快。已达到国际上同类工艺的技术水平,属国内领先。利用酶工程技术生产 L-天冬氨酸使其生产成本大大下降,必将产生较大的经济效益和社会效益。固定化细胞酶技术的日趋完善为生物技术的产业化开辟了很好的途径。