

## 研究论文

### 杂色鲍哈维弧菌耐药质粒的鉴定和分析

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摘要:

文章对引起杂色鲍 (*Haliotis diversicolor*) 肌肉萎缩症的病原菌哈维弧菌 (*Vibrio harveyi*) 质粒上的磺胺耐药基因进行研究, 结果显示, 该菌株对复方新诺明完全耐药, 其质粒上含有 *suII* 耐药基因。接合转化试验显示该质粒具可转移性, 可使受体菌对磺胺制剂复方新诺明产生耐药性, 鉴定为耐药质粒, 并测定了该耐药质粒的全基因组序列, 序列总长为 10 940 bp, 初步分析显示有 7 个具有一定功能的 ORF 框。进一步构建重组表达质粒 pRSET-A-*suII*, 表达了目的蛋白 (31 kDa)。

关键词: 哈维弧菌 耐药质粒 *suII* 基因

### Identification and analysis of resistant plasmid of pathogenic bacteria *Vibrio harveyi* isolated from *Haliotis diversicolor*

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Abstract:

The pathogenic bacteria *Vibrio harveyi* discovered in abalone *Haliotis diversicolor* with withering syndrome is completely resistant to trimethoprim-sulfamethoxazole. This study identifies the resistance genes and their location in this bacteria's plasmid. *suII* was detected in the plasmid with polymerase chain reaction. The conjugative transformation test shows that the plasmid is transferable and leads to the resistance of bacteria to sulfonamide. The complete sequence of the R plasmid is 10 940 bp long including 7 ORF which display biological function. *suII* was cloned into the multiple cloning sites pRSET-A (+) to build a recombinant positive plasmid. The SDS-PAGE indicates that the recombinant *suII* protein, in the form of inclusion body, is 31 kDa.

Keywords: *Vibrio harveyi* resistant plasmid gene *suII*

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- ▶ 哈维弧菌
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- ▶ *suII* 基因

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