

## 论文

### 15种氨基酸随机肽库的小盒式DNA编码文库的构建

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#### 摘要:

采用小盒式DNA编码文库的构建策略,选取在进化上可能起源较早的15种氨基酸,按照其简并密码子合成了一个为10个随机氨基酸编码的小盒式DNA模板,经过连续3轮的PCR扩增、酶切及连接的小盒式文库组装过程,成功构建了一个文库容量达 $1.31 \times 10^{12}$ /ml,随机编码区长达97个氨基酸的小盒式DNA编码文库。

**关键词:** 随机肽库 简化氨基酸 小盒式文库

### Construction of a DNA Library in Small Cassette Encoding Random Peptide Consisting of 15 Amino Acids

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#### Abstract:

Using a small cassette DNA encoding library construction strategies, DNA template encoding 10 random amino acids was synthesized according to degenerate codon of a 15 kinds amino acids set. After three consecutive small cassette library assembly process including PCR amplification, digestion and connection, a small cassette DNA encoding library which a random coding region with length up to 97 amino acids was successfully constructed, and library capacity was  $1.31 \times 10^{12}$ /ml.

**Keywords:** Random peptide library Simplified amino acids alphabet Library in small cassette

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