FR-008 DNA *

陈实 1,2 周秀芬 1,3 JEONG Hae-Young 3 CHOI Kang-Ryul 3 LEE Sang-Yup 3 邓子新 1,2
(1. Bio-X Life Science Research Center, School of Life Science and Biotechnology, Shanghai Jiatong University, Shanghai 200030, China; 2. Department of Chemical and Biomolecular Engineering, Korea Advanced Institute of Science and Technology, 373-1 Kusong-dong, Yusong-gu, Taejon 305-701, Korea; 3. Genotech Limited Company, Taejon 305-701, Korea)

Key words: streptomyces; FR-008 gene cluster; genetic analysis

Sequence Analysis of a Region Upstream of Antibiotic FR-008 Gene Cluster

CHEN Shi 1,2 ZHOU Xiu-Fen 1 JEONG Hae-Yong 3 CHOI Kang-Ryul 3 LEE Sang-Yup 3 DENG Zi-Xin 1,2

(1. Bio-X Life Science Research Center, School of Life Science and Biotechnology, Shanghai Jiatong University, Shanghai 200030, China; 2. Department of Chemical and Biomolecular Engineering, Korea Advanced Institute of Science and Technology, 373-1 Kusong-dong, Yusong-gu, Taejon 305-701, Korea; 3. Genotech Limited Company, Taejon 305-701, Korea)

1 FR-008

1.1 材料

FR-008 pH145 (Hu et al., 1994).
1.2 核苷酸序列

pH145 FR-008 DNA

1.3 基因功能分析

* FR-008

2 FR-008 基因簇上游区域序列测定

pH145 FR-008 fscO FAD 12 593 bp DNA

2.2 FR-008 基因簇上游区域 12.6 kb 序列的分析

pH145 FR-008 DNA 12 593 bp DNA

fscO FAD 12 593 bp DNA

12 593 bp DNA

12 593 bp DNA

12 593 bp DNA

12 593 bp DNA

12 593 bp DNA

12 593 bp DNA

12 593 bp DNA
Fig. 1. Gene organization of a 12.6 kb DNA immediately upstream of the leftmost fisO gene of FR-008 gene cluster.

Table 1 Product and putative protein functions encoded by the gene upstream of FR-008 gene cluster

<table>
<thead>
<tr>
<th>Gene</th>
<th>Product</th>
<th>Number of AA</th>
<th>Putative function</th>
</tr>
</thead>
<tbody>
<tr>
<td>fisO</td>
<td>lLJk]k</td>
<td>-</td>
<td>Amino acid transport and metabolism</td>
</tr>
<tr>
<td>fisP</td>
<td>lLJk]k</td>
<td>288</td>
<td>Amino acid transport and metabolism</td>
</tr>
<tr>
<td>fisC</td>
<td>lLJk]k</td>
<td>680</td>
<td>Amino acid transport and metabolism</td>
</tr>
<tr>
<td>fisD</td>
<td>lLJk]k</td>
<td>134</td>
<td>Amino acid transport and metabolism</td>
</tr>
<tr>
<td>fisE</td>
<td>lLJk]k</td>
<td>728</td>
<td>Amino acid transport and metabolism</td>
</tr>
<tr>
<td>fisF</td>
<td>lLJk]k</td>
<td>202</td>
<td>Amino acid transport and metabolism</td>
</tr>
<tr>
<td>fisG</td>
<td>lLJk]k</td>
<td>282</td>
<td>Amino acid transport and metabolism</td>
</tr>
<tr>
<td>fisH</td>
<td>lLJk]k</td>
<td>258</td>
<td>Amino acid transport and metabolism</td>
</tr>
<tr>
<td>fisI</td>
<td>lLJk]k</td>
<td>367</td>
<td>Amino acid transport and metabolism</td>
</tr>
<tr>
<td>fisK</td>
<td>lLJk]k</td>
<td>-</td>
<td>Amino acid transport and metabolism</td>
</tr>
</tbody>
</table>

3

