Defensin

Week 7

Summarized below are the experiments conducted this week in chronological order. Click on the experiment name to view it. To go back to this summary, click Summary in the footer.

Summary

1  Liquid Culture of pSB1C3-Def cells from iGEM HQ 2
2  Plasmid Extraction of pSB1C3-Def 3
3  PCR Amplification of pSB1C3-Def Plasmids 4
1 Liquid Culture of pSB1C3-Def cells from iGEM HQ

Responsible
Oscar He and Ellinor Lindholm

Results and Conclusions
Successful.
2 Plasmid Extraction of pSB1C3-Def

Responsible
Oscar He and Ellinor Lindholm

Protocols used
Plasmid Extraction

Modifications and comments to protocols
Plasmid Extraction - Step 1: centrifugation at 13,000 rpm (∼ 17,000 x g)
Plasmid Extraction - Step 10: DNA elution using EB Buffer

Results and Conclusions
Successful.
3 PCR Amplification of pSB1C3-Def Plasmids

Responsible
Oscar He and Ellinor Lindholm

Protocols used
PCR Amplification (Q5)
Gel electrophoresis

Modifications and comments to protocols
- PCR Amplification (Q5): 1 µl DNA sample used in PCR mix.
- PCR Amplification (Q5) primers: VF2_R (reverse) VF2_F (forward)

Results and Conclusions

Figure 1: Result of the gel electrophoresis of PCR product, with 1 % agarose at 100 V. (1) DNA Ladder (8) Def (9) Positive control (10) Negative control (11) DNA Ladder. The wells hidden behind the black rectangle correspond to unrelated samples that were run on the same gel.
Table 1: Concentration of PCR product measured with NanoDrop at 280 nm.

<table>
<thead>
<tr>
<th>Sample</th>
<th>Concentration [ng/µl]</th>
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<tbody>
<tr>
<td>Def HQ</td>
<td>90.7</td>
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Band at expected size, successful PCR amplification.

**Discussion and Troubleshooting**

The PCR amplification was successful and the sample was used for further experiments.