

Title: Yeast transformation with the OEP2

Date

14062019

Objective

To remove the ura3 gene from ylic132= ade2- ura3+ by inserting an empty sequence in the ade2 locus , where the ura3 gene is in ylic132.

Method

[Yeast transformation protocol](#)

Homology arms:

- left homology arm: 252 bp

PCR of primer_1_new_upstream_forward and primer_7_upstream

- right homology arm: 271 bp

PCR of primer_6_new_downstream_reverse_NO_Rga1 and primer_8_downstream

DNA concentration

7ul of 600 ng/ul OEP2 = 4.2 ug

Selection plates

- **-URA + 3x ADE** (for ylic132 positive control- no transformed cells) and for the transformed cells as a negative control
- **5FOA plates + 3x ADE** , in which only cells lacking URA3 are capable of grow . (positive control for the transformed cells)

Results

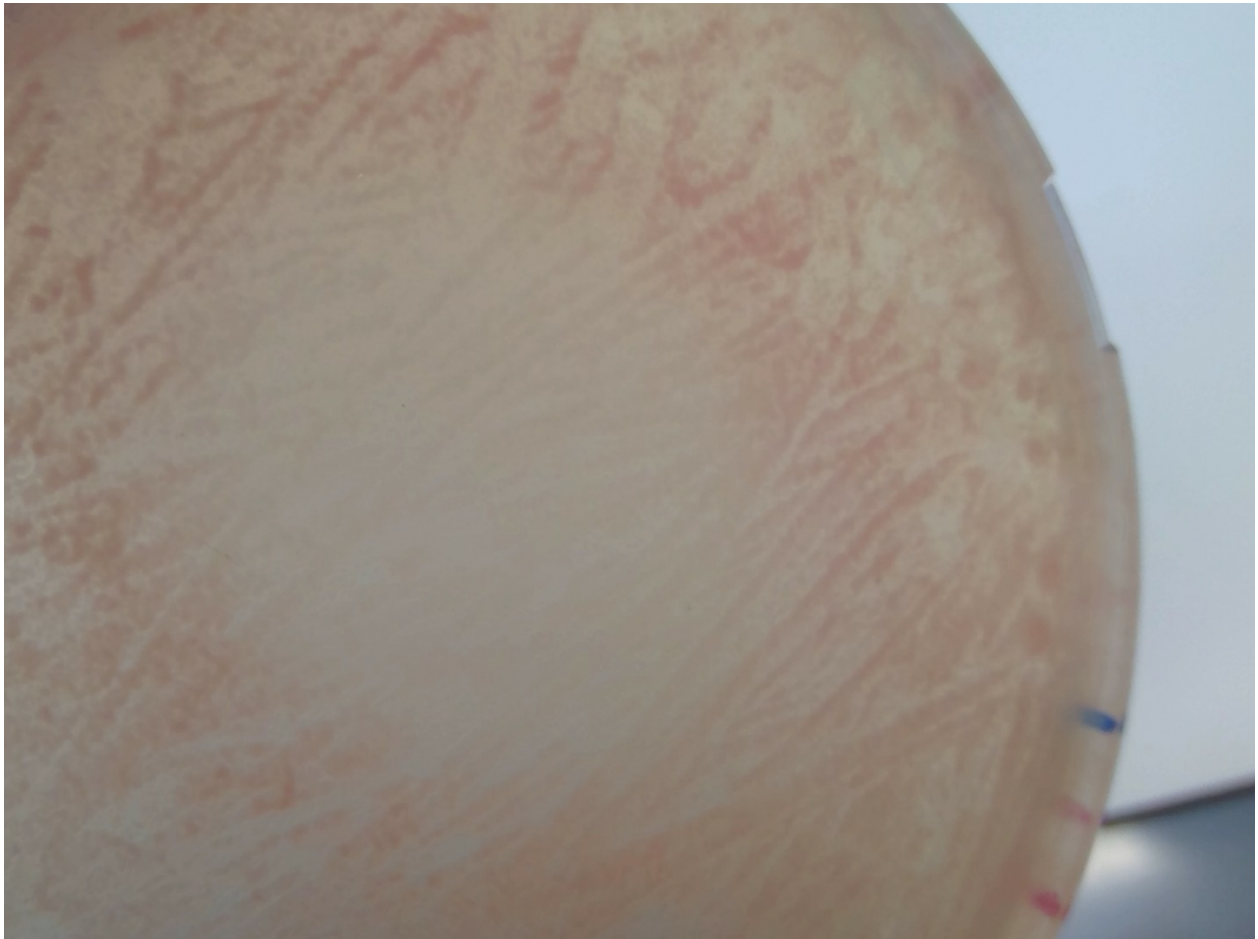
No growth in 5FOA plates on 17062019 😞

-> The reason could be that I made the protocol using the same amount of lithium acetate for a volume of 50ml instead of



Patterned growth of pink and lighter colonies in the -URA +3xAdE2 plates

-> Actually it was a gradient of adenine when I dropped. After some days that spot became pink :)



Next steps

- ☐ Prepare more OEP2 to have more concentration to transform.
- ☐ Repeat the transformation.