

A1 A2 A7 in LB TEST 04/08/09

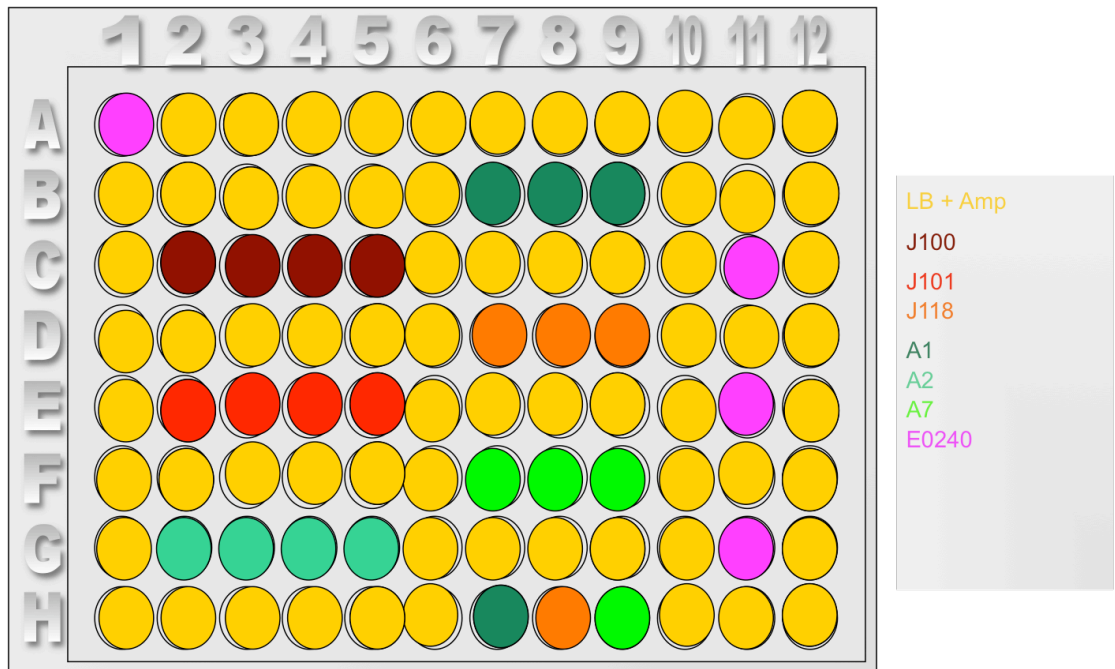
Description: Fluorescence in red and green for constitutive promoters

Purpose: Fluorescence test to estimate synthesis rate under the control of constitutive promoters of GFP and RFP in exponential phase of bacterial growth.

Methods:

Cultures of A1, A2, A7, J100, J101, J118 and RBS-30 have been inoculated from glycerol stock in 5 ml LB+Amp and incubated overnight. Next morning, they have been diluted 1:1000 and incubated for further 5 hours at 37°C 220 rpm.

- We measure cultures OD with a test plate and using formula:
 - $\text{ml of bacteria to keep} = (\text{OD}_{\text{wanted}} / \text{OD}_{\text{measured}}) * \text{new culture volume}$. Then the falcon tube is re-filled till reaching a volume equal to new culture volume.
- We have diluted all cultures till obtaining an OD of 0.5 or less.



Protocol:

- The test plate is filled to know the initial OD.
- After the dilution has been performed, the plate is filled as described in methods.
- We want to see the XFP synthesis rate in exponential phase so we sample every 3 minutes for 7 hours.
 - For 7 hours kinetic cycle of 3 minutes in which:
 - 15 seconds shaking linear 3mm
 - 10 s wait
 - Absorbance and green and red fluorescence measure: -> GAIN SETTING: MANUAL 50

- For the rest of experiment (untill 24 hours)
 - Kinetic cycle: 20 minutes
 - Shaking 15 s linear 3mm
 - Wait 10 seconds
 - Absorbance measurement
 - GFP measurement and RFP measurement: -> GAIN
SETTING: MANUAL 50