

FLUORESCENCE SPECTROMETRY

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|----------|---|-------|-------|-------|-------|-------|----------------------|-------|-------|----------------------|-------|----|
| A | | 0% | 0.05% | 0.20% | 0.40% | 0.60% | | | | | | |
| B | | Blank | Blank | Blank | Blank | Blank | 0 | 0.50% | 0.20% | 0.40% | 0.60% | |
| C | | AraC3 | AraC3 | AraC3 | AraC3 | AraC3 | BB1 | BB1 | BB1 | BB1 | BB1 | |
| D | | BB3 | BB3 | BB3 | BB3 | BB3 | RFP positive control | | | RFP positive control | | |
| E | | BB2 | BB2 | BB2 | BB2 | BB2 | GFP positive control | | | GFP positive control | | |
| F | | BB1.2 | BB1.2 | BB1.2 | BB1.2 | BB1.2 | | | | | | |
| G | | SP | SP | SP | SP | SP | | | | | | |
| H | | | | | | | | | | | | |

% refers to percentage Arabinose

Method

1. 250 ul of LB-media containing appropriate antibiotic was pipetted into each well.
2. Different arabinose concentrations were added in a subsequent manner to each of the columns.
3. Followingly each sample was diluted to OD 0.05 in a row like fashion.
4. Lastly, a serial dilution of Fluorescein dye was added to the last row.
5. The 96well plate was placed in a ClariOstar plate reader set at 37°C.
6. The fluorescence intensity was measured during 10 hours.
7. The mulichromatic setting measured GFP and mRFP for each well.
8. The data was exported as an Excel file and analysed using R software.

ClariOstar plate reader, 37°C

NUNC96 Thermofisher plate, black bottom

Orbital shaking before each cycle

240 cycles, 300s interval, 20 flashes per well

Multi-chromatic setting - mRFP(ex:550-20/em:605-40) and GFP(ex:488-14/em:535-30)