Fluorescence measurement

Material

Ampicillin antibiotics (Solarbio)

Arabinose (Solarbio)

Luria-Bertani liquid medium

Procedure

1. The cell populations were plated on LB agar with ampicillin antibiotics and individual colonies were subsequently grown overnight in 5ml Luria-Bertani liquid medium.
2. Cultures were back diluted 1:100 into fresh Luria-Bertani liquid medium with ampicillin antibiotics and 0.2% arabinose.
3. After growing for about 6-7hours, cells are on the logarithmic phase and we test the fluorescence of GFP and mCherry.
4. The OD600 and GFP and DsRed fluorescence were measured using a Varioskan Flash Multimode Reader(Thermo Scientific) until cells are on the logarithmic phase.
5. Set our instrument parameters and set up a 96-well plate with our culture. Then take the measurement and record it. The run software version is Skanlt Software 2.4.5 RE for Varioskan Flash.
6. GFP and mCherry were measured at excitation/emission wavelengths of 485
7. nm/520 nm and 587nm/610 nm, respectively. Each fluorescence value was normalized to the number of cells by dividing by the OD600.