ViTEST

Signal generation 7/15-7/17

Fluorescent calibration & sfGFP expression

EPFL iGEM

Monday, 15 July 2019

Title: Plate Reader Fluorescence Calibration

Aim: Measure the fluorescein according to the iGEM protocol in order to standardise our future GFP measurements.

Participants: Laura

Protocols: iGEM protocol

Notes:

We adapted the protocol to a 384 well plate because all our measurements during the project is done on this plate.

To to this we first did the dilutions as said on the original protocol in a 96 well plates. Then, we loaded the 384 well plate with these dilutions. We decided to do this way instead of diluting directly in the 384 well plate to avoid losing precision by pipetting small quantities.

Wednesday, 17 July 2019

Title: Expression of sfGFP (Part:BBa_I746909) in OnePot PURE system.

Aim: Prove that sfGFP can be expressed into OnePot PURE cell free system

Participants: Dana, Laura

Protocol: DNA rehydration, bacterial transformation, plasmid purification

What was done:

1. Rehydration of the Part:BBa_I746909 and transformation of the plasmid into competent cells
2. Cultivation of the bacteria and isolation of the plasmids
3. Preparation of Onepot system into a plate reader with the plasmid
4. Measurements in the plate reader during 3h at 37°

Results: We can see that sfGFP in expressed in OnePot PURE. The curve grows during 2 hours and stabilizes after.