

Sampling Procedures

Introduction

Here, the procedure for sampling of the shake-flask and bioreactor cultivations is described.

Materials

› Consumables

- › 10 mL syringe (bioreactor)
- › 15 mL falcon tube
- › 1.5 mL eppendorf tube
- › Corning® Clear Polystyrene 96-Well Microplate

Procedure

Shake flask cultivation

1. In a clean bench, approximately 1 mL of sample containing biomass was sampled via pipetting
2. 100 uL sample containing biomass was transferred to a spectrophotometry plate
3. 200 uL of sample was spun down at 10.000 g for 3 min. and 100 uL transferred to a spectrophotometry plate
4. Immediately after sampling, samples in the spectrophotometry plate was measured for fluorescence according to the measurement protocol, and the remainder of the sample in the eppendorf tubes stored at -20 C.

Bioreactor cultivation

5. For sampling of the bioreactor, extra care was taken to prevent contamination
6. The sterile 10 mL syringe was sprayed with 70% ethanol and inserted in the sampling tube
7. The clamps on the sampling tube were loosened and 5 mL sample was drawn and discarded
8. The syringe was again sprayed with 70% ethanol, and reinserted in the sampling tube
9. Approximately 10 mL sample containing biomass was drawn and transferred to a 15 mL falcon tube
10. The clamps on the sampling tube were tightened, and the sampling tube sprayed with 70% ethanol
11. The samples were stored at -20 C for later protein purification.