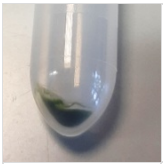

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Dry cell weight by centrifugation

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1 Works for me This protocol is published without a DOI.

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ABSTRACT

This protocols describe the steps required for dry cell weight measurements using microcentrifugal tubes.

PROTOCOL CITATION

Joao Vitor Molino 2020. Dry cell weight by centrifugation. **protocols.io** https://protocols.io/view/dry-cell-weight-by-centrifugation-bkrbkv2n

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GUIDELINES

Cell density for harvesting is important. The final mass weighted need to be inside the linear range of the balance. All steps described in this protocol are intended to be conducted in a research laboratory.

Material

1
- Analytical balance with high precision *(The higher the precision the better. For example a balance with a 0.1mg readability, could account to approximately 10% error alone in a measurement of 1mL sample of a culture at 1g/L)*
- Microcentrifugal tubes
- Microcentrifuge

Tubes preparation

2
1. Label microcentrifugal tubes
2. Dry the tubes at **90 °C** , **Overnight**

3. Cool tubes at **Room temperature** for **00:30:00**
4. Record the weight of the tubes

Weighting the dry cell material

3
1. Harvest 2 mL of culture in a previously weighted tube
2. Centrifuge the sample at **20000 rcf, 25°C, 00:01:00**
3. Carefully remove the supernatant by pipetting
4. Wash the cells with ddH20, and centrifuge the sample at **20000 rcf, 25°C, 00:01:00**
5. Carefully remove the supernatant by pipetting
6. Dry the tubes at **90 °C** , **Overnight**
7. Cool tubes at **Room temperature** for **00:30:00**
8. Record the weight of the tubes
9. Subtract the initial tube weight to achieve the dry cell weight