

Inducing Biofilms on Polypropylene Scaffold Torus Structures Protocol

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Protocol:

1. Grow liquid culture of E.coli MG1655
2. Measure OD of the culture.
3. 250ml of biofilm culture is required for each tori, so apply a correction factor to the culture to make the biofilm culture have an OD of 0.01. ($\{\text{OD you want} / \text{OD you have}\} \times \text{volume you are inoculating} = \text{volume of liquid culture required}$).
4. Add required amount of the culture for the number of tori being inoculated to a 1L plastic beaker (maximum of 3 tori per beaker).
5. Pour LB into the beaker to make it up to half the biofilm culture.
6. Pipette 250 μ l of chlorhexidine gluconate surfactant per torus to the beaker for a 0.1% concentration.
7. Pour the remaining LB to make it up to 250ml of the biofilm culture per sponge.
8. Incubate in a static incubator at 37°C overnight for 22 hours.
9. Follow “Testing the Effectiveness of the Metal Binding Reactor Protocol” for use of the tori in the metal binding reactor.