





Bacterial Cellulose Cleaning




Introduction

The purpose of cleaning is to remove any remnants of *Komagataeibacter rhaeticus* or media residue from the BC pellicles, then use NaOH to make it amorphous, and water to neutralize the NaOH to make films.

Reagents

-  BC samples
-  Milli-Q H₂O
-  0.1 M NaOH solution
-  Ethanol

Equipment

-  250 mL cylindrical beakers
-  Hot plate
-  pH probe

Procedure

1. Pour enough ethanol into a cylindrical beaker to immerse the BC samples for 40 minutes.
2. Transfer this solution into another beaker with water and boil for 40 minutes.
3. Transfer the solution into the 0.1 M NaOH solution and heat it at 90°C for 1 hour and 20 minutes.
4. Transfer the solution into Milli-Q H₂O and allow it to rest for 24 hours.
5. Prepare the pH meter by calibrating using pH buffer solutions.
6. Measure the pH of the resulting product; if the reading is still basic, repeat step 4 again until neutralized.