

Preparation of BC for X-Ray Diffraction Measurements by Room Drying





Introduction

This protocol prepares bacterial cellulose samples by room-drying them as a precursor for x-ray diffraction measurement.

Reagents

-  Cleaned BC samples

Equipment

-  Glass slides
-  String
-  Chromatography paper
-  Petri dishes

Procedure

1. Acquire chromatography paper and fold it into an accordion-like shape, approximately the width of a laboratory microscope glass slide.
2. Place cleaned BC samples between 2 folds of the chromatography paper. Repeat as many times as necessary until samples are exhausted.
3. Bunch up the samples in the chromatography paper, making sure they do not leak over the edges of the paper and place the entire setup between two glass slides. Squeeze gently to settle the BC samples and spread them out lightly.
4. Tie the string around the entire setup and allow the samples to dry for 4 days.
5. Remove the samples once they are dry and peel them away from the chromatography paper.
6. Prepare the dried samples for x-ray diffraction measurement by cutting them into a 1 cm² pieces and placing them into petri dishes.