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ConA Cover Slide Preparation

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Protocol status: Working

We use this protocol and it's working

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Abstract

Concanavalin A is used to attach yeast cell to surfaces. This protocol describes the preparation of cover slides for high resolution fluorescence microscopy.

Materials

Concanavalin A (ConA) from *Canavalia ensiformis*:

Sigma-Aldrich

Cat#: C2272-10MG

Lot#: 129H0322

UltraPure Distilled Water

Cover slides ø 25mm, No. 1.5 or 1.5H

Attotfluor Cell Chamber

Thermo Fisher Scientific

Cat#: A7816

Equipment:

10 ml centrifugation tube

10 ml pipette

Quorum Emitech K100X glow discharger
mixer



Before start

Have the following solutions premixed:

Concanavalin A (ConA) solution:



Concentration: 1 g/l

resolve 10 mg ConA in 10 ml distilled water, vortex

store at  -20 °C







Cover slide preconditioning

- 1 Rinse a 25mm cover slide No. 1.5 or No. 1.5H.
Dry with Kim wipe, remove leftover driplet with optical tissue.
- 1.1 Plasma clean the cover slide to a hydrophilic negative charged surface.
Quorum Emitech K100X glow discharger at  25 mA  00:00:45
- 1.2 Place the cover slide in the cell chamber.

45s

ConA slide preparation

30m

- 2 Defrost the stock ConA of a concentration of  1 mg/mL
- 2.1 Pipette  1 mL ConA solution into the cell chamber.
- 2.2 Let the ConA settle, covered with Kim wipe for  00:10:00 at the bench.
- 2.3 Remove the ConA from the chamber back in its container.
Let the cover slip dry, covered with Kim wipe for  00:20:00 .

10m

20m

Note

The prepared ConA cover slides can be used within a week, if stored in ways that secure its not exposed to dirt and dust.