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Poly-Lysine Coverslip Preparation V.1

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Abstract

Poly-Lysine Coverslip Preparation

This section describes the process of creating Poly-lysine-coated coverslips that are used for the tissue slices in the CODEX® experiment workflow.

Guidelines

After incubation, coverslips can be stored for up to 2 months at room temperature. To prevent removal of polylysine, do not soak in water for >1 minute during each washing step.

Materials

MATERIALS

X Poly-I-lysine, 0.1% (wt/vol) Merck MilliporeSigma (Sigma-Aldrich) Catalog #P8920

- 1 Remove the coverslips from box.
- 2 Gently place coverslips at the bottom of the glass beaker
- 3 Slowly swirl the beaker to spread the stacks of coverslips.
- 4 Add ca. 7 mL of poly-lysine solution above the coverslips to ensure that all coverslips are fully covered.
- 5 Cover the beaker with plastic wrap and seal with a rubber band to prevent evaporation.
- 6 Leave coverslips in poly-lysine solution for a minimum of 12 hours and up to one week at room temperature.
- 7 After incubation period, the washing and storing coverslips steps begin.
- 8 Gradually pour poly-lysine solution into the proper waste container.
- 9 Fill the beaker containing the coverslips to half volume with ddH20
- 10 Swirl the contents to mix the solution.
- 11 Let the beaker and coverslips sit for 30 seconds.
- 12 Slowly pour off the water into the sink
- 13 Repeat steps 9-12 more times for a total of 7 washes.

- 14 Place two sets of paper towels on the bench top.
- 15 Remove the coverslips from the water, placing them on top of the first set of lint free paper towels. Ensure coverslips are not overlapping to allow proper drying.
- 16 Invert each coverslip. Dry the reverse side on the second set of paper towels.
- 17 Leave the coverslips on the paper towels to dry.
- 18 When they are dry, the Poly-lysine-coated coverslips can be stored in a petri dish or covered similar container.