



Mar 07, 2022

PEI Coating

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protocol .

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PEI coating 96 and /or 384 wps for highly adherent NGN2 iN replating on DIV3

[Based on SOP from Max+ Bobby / Background optimization results](#)

Also refer to: <https://www.protocols.io/view/pei-laminin-coating-b5y8q7zw>

kat.titterton 2022. PEI Coating. **protocols.io**
<https://protocols.io/view/pei-coating-b5y9q7z6>



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PEI Stock Prep (1x)

1 Add **500 mg** of



Polyethylenimine (branched) Sigma


Aldrich Catalog #408727-100ML

to a 50mL

conical tube.

PEI stock is an extremely high viscosity liquid. To weigh, Torr a liquid vessel of appropriate volume and use an object to 'stick' goopy PEI on the side to weigh.

2 Add  **30 mL** of  **Gibco™ Distilled Water Gibco - Thermo**
Fischer Catalog #15-230-170 to the tube


3 Heat the PEI solution to ~  **37 °C** on beads. Mix intermittently until PEI is dissolved.

PEI takes a while to go into solution: Shake conical and/or bottle vigorously ever 5-10 min. Takes at least 30 min to fully into solution. Can use hot water directly from tap as a bath to speed up heat transfer.

4  **Gibco™ Distilled Water Gibco - Thermo**
Add **Fischer Catalog #15-230-170** to bring
volume up to  **45 mL** . Mix again.

5 Filter-sterilize: pour concentrated PEI solution into a 500mL filter flask.

FOR 1x stock final [PEI] =  **1 mg** /  **1 mL** : Add

 **Gibco™ Distilled Water Gibco - Thermo**
Fischer Catalog #15-230-170 to bring
volume up to 500mL.

6 Aliquot PEI solution into 50mL conicals. Use immediately or proceed to step 7

7 Store in  **-20 °C** freezer #13 shelf #9