

Catalog# 24765 - Polyethylenimine HCI MAX, MW 40000, Transfection Grade

# Transfection Reagent Preparation and Storage Recommendations

# Transfection Reagent Preparation (1 mg/mL)

#### **Materials**

- ➤ 1g PEI MAX 40K (Polysciences Catalog# 24765)
- ➤ 1L Milli-Q® water, water for injection (WFI), or comparable biological-grade water
- > 1N Sodium Hydroxide, USP
- > Sterile 25 mL plastic pipette
- > 0.1μm, 0.2μm, or 0.22μm PES vacuum sterile-filter unit
- > Sterile HDPE or polypropylene storage vials

#### **Equipment**

- 1L glass beaker
- > PTFE-coated stir bar
- Magnetic stir plate
- ➤ 1L glass graduated cylinder
- > pH meter
- > Pipette controller
- > Vacuum pump with tubing

### Method

- 1. In 1L glass beaker, suspend 1g of PEI MAX 40K in 900 mL water.
- 2. Add PTFE-coated stir bar to 1L glass beaker and set stirring to produce small vortex.
- 3. Wait for PEI MAX 40K to completely dissolve. This typically takes less than 5 minutes.
- 4. Use 25 mL plastic pipette to add 1N sodium hydroxide dropwise to 1L glass beaker until pH is 6.90 to 7.10.



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- 5. If pH accidently exceeds 7.10, use 1N hydrochloric acid and a new 25 mL plastic pipette to lower pH back to 6.90 to 7.10.
- 6. Decant solution from 1L glass beaker to 1L graduated cylinder.
- 7. Add water to 1L graduated cylinder to adjust final volume to 1L.
- 8. Sterile-filter solution through vacuum membrane.
- 9. Aliquot solution as desired.
- 10. Store aliquots at 4°C

## Transfection Solution Storage and Shelf Life

At 4°C in a suitable container, the transfection solution will retain its maximum performance for at least six months. For qualitative work, the solution may be suitable for use for up to a year.

## Support

We're here to help! Our technical staff can troubleshoot most common and not-so-common issues. Send us an email at **info@polysciences.com** and we will get back to you, typically within one business day.

## **Pre-made Solutions**

We offer pre-made solutions of PEI MAX 40K as our Transporter  $5^{\text{TM}}$  Transfection Reagent (<u>Catalog#</u> 26008). Transporter  $5^{\text{TM}}$  is  $0.1\mu\text{m}$  sterile-filtered, fully qualified for transfection, and continuously retested to ensure reliably high protein yields.

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