

Linear PEI for Gene Transfection

Linear PEI HCl [1mg/mL in PBS(-)] [for Transfection] 1mL / 10mL [L0466]

Advantages

- Filter-sterilized Ready-to-Use Linear PEI Solution
- Deacylated for High Transfection Efficiencies
- Negligible Cytotoxicity

Usage Example: Transfection of GFP Vector into HeLa Cells

1. HeLa cells were plated on 6-well plates at a concentration of 60,000 / well, 18 hours prior to transfection.
2. A mixture of L0466 and Opti-MEM[®] was prepared such that the final concentration of L0466 upon transfection would be 2 µg/mL.
3. A mixture of DNA and Opti-MEM[®] was prepared such that the final N:P ratio of DNA to PEI would be 20.
4. The mixtures from steps 2 and 3 were mixed at a 1-to-1 ratio, and allowed to incubate for 20 minutes at 37°C.
5. The mixture from step 4 was diluted 1-to-1 with RPMI 1640, and used to replace the culture medium from the pre-plated cells from step 1.
6. 6 hours later culture medium was replaced with fresh medium.
7. The following day cells were trypsinized and their GFP fluorescence was analyzed via FACS.

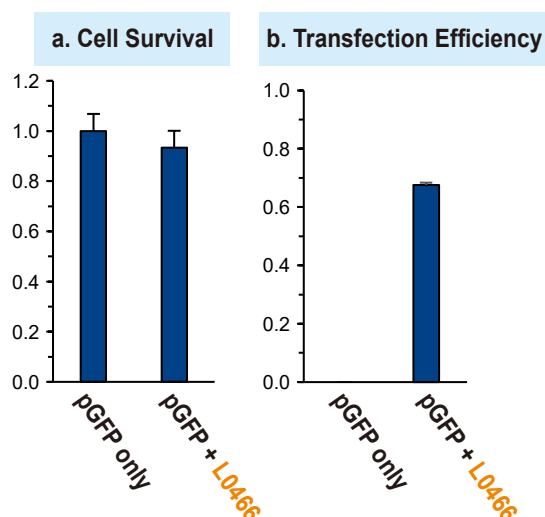


Figure. Transfection of GFP Vector into HeLa Cells
 (a) Ratio of surviving cells as measured with ATP-Luciferase Cell Viability Assay Solution [A3519] (93.4% using pGFP only as control, n=3)
 (b) GFP+ Cells as Measured via FACS (pGFP only = 0%; pGFP + L0466 = 68%, n=3)
 Transfection using L0466 results in high transfection efficiency with little to no cytotoxicity.

Related Product

Presome[®] ACD-1

100mg [P2807]

References M. Thomas *et al.*, *Proc. Natl. Acad. Sci. USA* **2005**, *102*, 5679. <https://doi.org/10.1073/pnas.0502067102>
 S. E. Reed *et al.*, *J. Virol. Methods* **2006**, *138*, 85. <https://doi.org/10.1016/j.jviromet.2006.07.024>

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