



Lipofectamine or Turbofect transfection protocol

Routinely used for cultured cells (HEK293T)

Transfection into 6-well plates:

1. Seed 0.4 to 0.5×10^6 cells/well 1 day prior to transfection. Grow cells to ~80% confluency prior to transfection (may require seeding at higher densities, depending doubling time).
2. For each transfection (in each well), dilute $1\mu\text{g}$ pDNA (plasmid DNA) into $100\mu\text{l}$ s serum-free prewarmed DMEM (also P/S – penicillin/streptomycin, Gln – glutamine, HEPES-free) in an Eppendorf (1.5ml) tube.
3. In a second tube, add $5\mu\text{l}$ s of Lipofectamine (2000) or Turbofect to $100\mu\text{l}$ s DMEM (serum/PS/Gln/HEPES-free) per 6-well transfection, and mix. Add the Lipofectamine or Turbofect/DMEM mixture to the diluted DNA; mix and incubate for 15 mins. at room temperature.
4. While DNA/lipid complexes are forming, wash cells twice with prewarmed 1x PBS, 1ml per wash per well. Then add $800\mu\text{l}$ s DMEM (serum/PS/Glu/HEPES-free) and incubate the cells at 37°C .
5. Add the pDNA/Plus-reagent/lipid mixture to each well dropwise ($200\mu\text{l}$ s per well).
6. Incubate 3-5 hours at 37°C
7. Add $800\mu\text{l}$ s of 2x DMEM (16% FBS, 2x P/S, Gln, HEPES)

Notes:

- Transfections can be scaled up or down to desired plate formats.
- Cells are generally transfected at lower densities on coverslips for immunofluorescence staining and analysis.