

ProteanFect™ TuffCell Transfection Kit

What's in the Package

- 1x User Manual
- Reagent A, B, and C
- EGFP mRNA
- EGFP pDNA (with general kit)

Storage Requirement

- Entire Kit can be stored at -80°C
- Reagent A and C can be stored at 4°C

Quick Protocol: per well of a 96-well plate

1. Transfection Complex Preparation

- Mix Reagent A (40 μ L) with mRNA (0.5 μ g).
- Add Reagent B (1.4 μ L) and mix with pipette (20-30x or vortex for 10seconds).

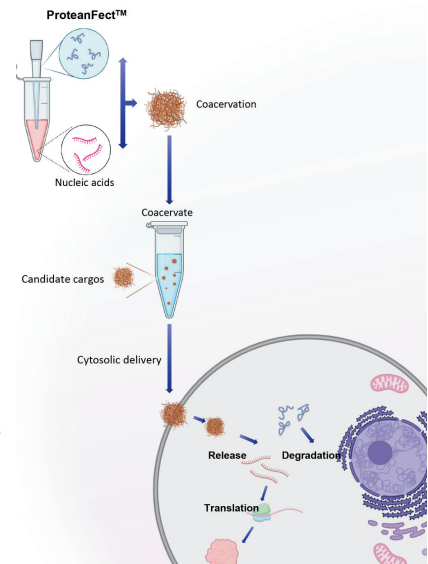
2. Cell Preparation

- Suspension cells - Harvest cells by centrifugation at 300g for 5 min. Discard supernatant and wash once with Opti-MEM. Resuspend cells with Opti-MEM at 5×10^5 - 1×10^6 cells/mL.⁶⁷
- Adherent cells - Maintain 50-80% cell confluence. Remove medium, wash cells once with Opti-MEM, add 20 μ L of Opti-MEM.

Optional: Harvest cells by trypsinization, then resuspend them in Opti-MEM at a concentration of 5×10^5 - 1×10^7 cells/mL for subsequent transfection.

3. Transfection

- Mix complex with cells: For suspension cells, mix 40 μ L of transfection complex with 20 μ L of cell suspension and gently pipetup and down 2-3 times. For adherent cells, apply directly to the cells.
- Incubate the cells with the transfection complex for 45-60 minutes in a cell culture incubator.
- Terminate the reaction by adding > 200 μ L of culture medium (10x cell suspension), then transfer the cells from the tube to the culture plate. For adherent cells, replenish with ≥ 200 μ L of complete culture medium.
- Incubate transfected cells in culture medium and assess transfection efficiency after 5 to 48 hours, or at an appropriate time.



Additional Notes

- Avoid including FBS in the transfection medium.
- The cell pellet may adhere to the tube walls. Gently remove the supernatant to minimize cell loss.