

ABCEPTA CUSTOM SERVICES:

Transfection Protocol

Materials

- U Cell line cultured in the appropriate growth medium
- U Plasmid DNA
- U Lipofectamine
- U Basic Medium (without serum)
- u Appropriate cell culture plates and supplies

Procedure

1. Adherent cells: Plate $0.5-2 \times 10^5$ cells in 500 uL of growth medium without antibiotics at the day before transfection, so that cells will be 90-95% confluent at the time of transfection.

Suspension cells: Just plate $4-8 \times 10^5$ cells in 500 uL of growth medium without antibiotics.

- 2. For each transfection sample, prepare complexes as follows:
 - a. Dilute DNA in 50 uL of Basic Medium. Mix gently.
 - b. Mix Lipofectamine gently before use, then dilute the appropriate amount (DNA: Lipofect = 1:2.5) in 50 uL of Basic Medium. Incubate for 5 minutes at room temperature.
 - c. After the 5 minute incubation, combine the diluted DNA with diluted Lipofectamine (total volume = 100 uL). Mix gently and incubate for 20 minutes at room temperature (solution may appear cloudy).
 Note: All the steps should be finished with in 25 minutes.
- 3. Add the 100 uL of complexes to each well containing cells and medium. Mix gently by shaking the plate left and right.
- 4. Incubate cells at 37 $^{\circ}$ C in a CO₂ incubator for 18-48 hours before testing for protein expression. Medium may be changed after 4-6 hours.
- 5. Stable cell lines: Passage cells at a 1:10 (or higher dilution) into fresh growth medium 24 hours after transfection. Add selective medium (if desired) the following day.