

Cellite® Transfection Reagent Protocol

Cellite@ transfection reagent is a polymer formulation for the transfection of nucleic acid into eukaryotic cells. Cellite@ transfection reagents provide higher transfection efficiency in most of cell types we tested that any current available transfection reagents on market.

Transfection Procedure

Note: all quantity and volume is given on per well of 96-well plate, it should be scale up or down based on cell numbers if you use different cell culture plastic wares

1. Seed cells into 96 well plate

- a. For adherent cells: plate 5,000 -10,000 cells/well the day before to get about 90% confluent at the time of transfection.
- b. For suspension cells: suspension culture cells should be in good growth condition before transfection.

2. Transfection Complex Preparation

- 1) Solution A: Add DNA to an Eppendorf tube and dilute with Cellite Buffer to final volume of 5 μ l for one well of 96-well transfection. *Note: The optimal DNA quantity per well varies for different cell types, usually in the range of 0.2 - 0.5 μ g/well of 96-well plate.*
- 2) Solution B: Add Cellite@ Reagent to an Eppendorf tube and dilute with Cellite@ Buffer to 5 μ l for one well of 96-well transfection (1 μ l of Cellite@ Reagent should be used for 1 μ g of DNA). *Note: The total volume of Cellite@ Reagent should be calculate if more well need to be transfected).*
- 3) Mix Solution A and B and incubate at room temperature for 15 minutes.

3. Add transfection complex into cells: dilute 10 μ l of transfection complex by adding 100 μ l of OPTI-MEM (preferred) or 100 μ l of other serum-free growth medium

- a. For adherent cells, Aspirate the growth medium from the wells, and add the diluted transfection complex complexes to the well.
- b. For suspension cells, 10,000 cells/well should be resuspended in 100 μ l of Opti-MEM or serum free growth medium (it is better to wash once with PBS if it is possible). Add the diluted transfection complex complexes to the well.

4. Change back to normal cell culture medium 2 hour to overnight post-transfection.

5. Incubate the cells for 18 – 48 hours prior to check transgene expression.