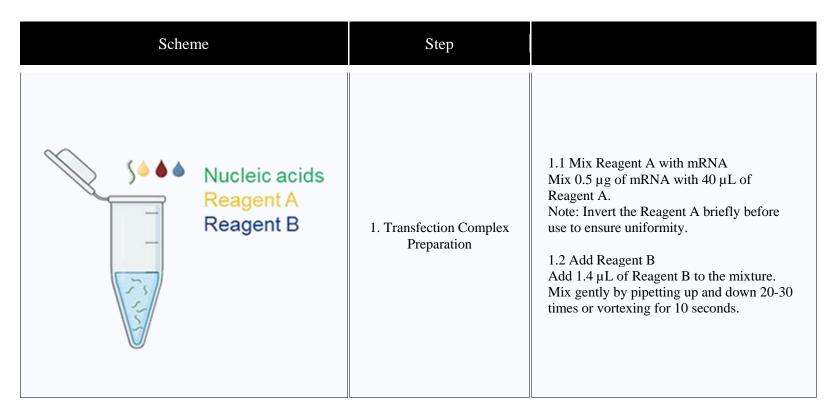
Transfection Protocol for mRNA per Well of a 96-Well Plate



Scheme	Step	
	2. Cell Preparation	 2.1 Suspension cells Harvest the cells by centrifugation at 300 g for 5 minutes. Discard the supernatant and wash cells once with Opti-MEM. Resuspend cells with Opti-MEM and adjust concentration to 5×10⁶ - 1×10⁷ cells/mL. Note: Avoid including FBS in the transfection medium. 2.2 Adherent cells Maintain 50%-80% cell confluence. Remove medium, wash cells once with Opti-MEM, then add 20 μL of Opti-MEM. Note: Avoid including FBS in the transfection medium. Optional: Harvest cells by trypsinization, then resuspend them in Opti-MEM at a concentration of 5×10⁶ - 1×10⁷ cells/mL for subsequent transfection.
	3. Transfection	 3.1 Mix transfection complex with cells For suspension cells, mix 40 μL of transfection complex with 20 μL of cell suspension and gently pipet up and down 2-3 times. For adherent cells, apply directly to the cells. 3.2 Incubation Incubate the cells with the transfection complex for 45-60 minutes in a cell culture incubator.

Scheme	Step	
		3.3 Termination Terminate the reaction by adding ≥200 µL of culture medium (10X cell suspension), centrifuge at 300 g for 5 minutes, and discard the supernatant. For adherent cells, replace the transfection mixture with ≥200 µL of culture medium (10X cell suspension). Note: The cell pellet may adhere to the tube walls. Gently remove the supernatant to minimize cell loss. 3.4 Post-transfection culture Incubate the transfected cells in culture medium and assess transfection efficiency after 5 to 48 hours, or at an appropriate time.