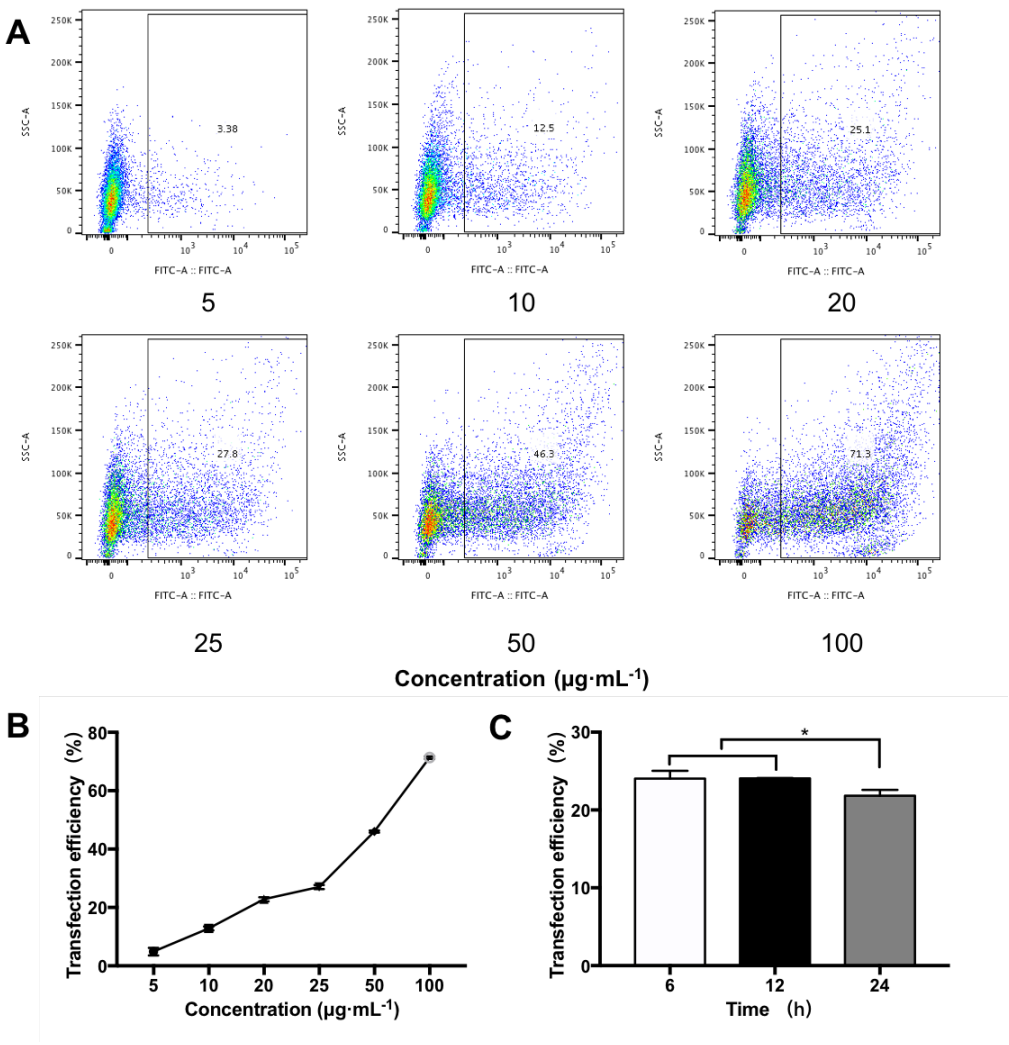
Methods

Flow cytometry (FCM)

The rBMSCs were seeded at 1×10^5 cells/well in a 6-well plate and incubated overnight. The delivery systems, which loaded with fluorescence-labeled miR-26a, were added to each well at final concentrations of 5, 10, 20, 25, 50, and 100 μg/mL. At various time points post incubation, the cells were collected and washed thrice with PBS. The efficiency of transfection was characterized by FCM (BD FACSCalibur, San Jose, USA) and the obtained results were analyzed using the FlowJo software (Tree star, Ashland, OR).

Results

Supplementary Figure 1. Transfection efficiency detected by FCM.



Notes: (**A**) Fluorescence intensity of rBMSCs transfected with different doses of MSN_miR-26a@PEI-KALA and MSN_miR-NC@PEI-KALA at 12 h. (**B**) Transfection efficiency of rBMSCs treated with different doses of MSN_miR-26a@PEI-KALA at 12 h. (**C**) Transfection efficiency of rBMSCs treated with 20 μg/mL MSN_miR-26a@PEI-KALA at 6 h, 12 h, and 24 h. (*P < 0.05, compared with the control).

Abbreviations: FCM, flow cytometry; MSN, mesoporous silicon nanoparticle; rBMSCs, rat bone marrow mesenchymal stem cells.