

Measurement of cell migration

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Abstract

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Protocol

Step 1.

Seed cells at a density of 1×10^5 cells/well in a 24-well plate. Culture cells under 5% CO₂, in a 95% humidified atmosphere at 37°C.

Step 2.

After 6 hours of transfection, draw a straight line along the midline of each well with a P-20 pipette tip and ensure that the width of the lines drawn between the well is approximately the same.

Step 3.

Discard the medium, wash twice with PBS, and add the fresh medium.

Step 4.

Take the pictures under microscope to record the cell spacing, that is, the width of the line drawn, and record the time point as 0 h.

Step 5.

Take pictures every 12 h for 48 h using a Nikon Ti-S fluorescence microscope.

Step 6.

Measure the cell spacing of each time point by using the Image-Pro Plus software.

Step 7.

Analyze the cell migration rate by statistical analysis.