Abstract

A new micro-chamber is provided wherein a channel capable of selectively recovering a migrating cell in the micro-chamber can be opened or closed by reversibly changing the shape of the micro-chamber during culture.

The micro-chamber comprises a cell culture section 110 formed in an elastic polymer which is optically transparent in visible regions, channels 108, 109 positioned at both ends of the cell culture section, air reservoir 105, 106 for controlling, by expansion or contraction, the open or close state of the channels, air passages 103, 104 for applying pressurization or depressurization to the air reservoirs, and connecting joints 101, 102 to an air pressure control section, all of which are disposed on an optically transparent base plate 112 such as a slide glass etc., whereby a culture solution containing cells can be continuously passed to a direction of flow 107.