

Title (en)

MICROFLUIDIC SYSTEM FOR CONTROLLING THE CONCENTRATION OF MOLECULES FOR STIMULATING A TARGET

Title (de)

MIKROFLUIDISCHES SYSTEM ZUR REGELUNG DER KONZENTRATION VON MOLEKÜLEN ZUR STIMULIERUNG EINES ZIELS

Title (fr)

SYSTÈME MICROFLUIDIQUE POUR CONTRÔLER LA CONCENTRATION DE MOLÉCULES DE STIMULATION D'UNE CIBLE.

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Application

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Priority

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Abstract (en)

[origin: CA2833857A1] The invention relates to a microfluidic system for controlling a card for the concentration of molecules capable of stimulating a target, for example formed by an assembly of living cells, characterized in that the system comprises a microfluidic device (1) comprising: $n_c = 1$ microfluidic channel(s) (4, 40), the or each channel being provided with at least one inlet orifice for at least one fluid and with at least one outlet orifice for this fluid; $n_0 = 2$ openings (47, 470) formed in the microfluidic channel or distributed in the various microfluidic channels, said openings being arranged in one and the same plane so that they form a network having at least one dimension in this plane, the numbers n_c of microfluidic channel(s) and n_0 of openings being linked by the relationship (I) with $1 = i = n_c$ and n_0/c_i the number of openings for the channel c_i ; at least one microporous membrane (5) covering the network of openings, the target being intended to be positioned on the side of the membrane which is opposite the microfluidic channel(s); one or more fluid feed means for feeding the or each microfluidic channel with fluid, at least one of these fluids comprising molecules for stimulating the target.

IPC 8 full level

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