

Title (en)

MICROFLUIDICS MODULE AND CARTRIDGE FOR IMMUNOLOGICAL AND MOLECULAR DIAGNOSIS IN AN ANALYSIS MACHINE

Title (de)

MIKROFLUIDIK-MODUL UND KASSETTE FÜR DIE IMMUNOLOGISCHE UND MOLEKULARE DIAGNOSTIK IN EINEM ANALYSEAUTOMATEN

Title (fr)

MODULE MICROFLUIDIQUE ET CARTOUCHE DE DIAGNOSTIC IMMUNOLOGIQUE ET MOLÉCULAIRE DANS UN ANALYSEUR AUTOMATIQUE

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Application

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Abstract (en)

[origin: WO2015158818A1] The invention relates to a microfluidics module (100) for both the immunological and molecular diagnosis of samples, wherein channels (1, 3, 3', 3'', 4, 7, 7', 7'', 8, 8') and/or cavities (2, 5) having inlets (1a, 1b, 3a-3i) for fluid samples and reagents, as well as inlet-assigned containers, container receiving means or container anchoring points are formed in a main body, and which module has a detection channel (80), for receiving a test-specific detection medium, that can be connected with channels (8, 7, 3) of the module. A central multi-port valve (6) is essential for the function, and controllably connects individual channels (3, 4, 7, 7', 7'', 8) on the module. The channels belong to channel structures which are assigned certain functions and which are all directly or indirectly connected to the multi-port valve (6), wherein at least sections of the channel structures and channels form circuits (10, 30, 40, 70), the channels (1, 3, 3', 3'', 4, 7, 7', 7'', 8, 8') and/or cavities (2, 5) of which circuits are at least partially arranged close to the base surface (120), in order to permit procedures, controlled by the analysis device, within the test process. The invention also relates to a cartridge (200) for receiving a microfluidics module (100), a reagent module (300), and a method for carrying out both immunological and, optionally, molecular tests using the microfluidics module (100).

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See references of WO 2015158818A1

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