Title (en)

METHOD FOR DETERMINING THE CELL AGGRESSIVENESS GRADE OF CANCER CELLS OR OF CANCER STEM CELLS

Title (de)

VERFAHREN ZUR BESTIMMUNG DES AGGRESSIVITÄTSGRADES VON KREBSZELLEN ODER KREBSSTAMMZELLEN

Title (fr)

PROCÉDÉ DE DÉTERMINATION DU GRADE D'AGRESSIVITE CELLULAIRE DE CELLULES CANCEREUSES OU DE CELLULES SOUCHES CANCEREUSES

Publication

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Application

EP 14831029 A 20141224

Priority

- FR 1363547 A 20131224
- FR 2014053552 W 20141224

Abstract (en)

[origin: WO2015097419A1] The subject matter of the invention is a method for determining, in vitro, the cell aggressiveness grade of cancer cells or for detecting cancer stem cells in a cell sample originating from a solid tissue suspected of being cancerous, comprising at least the following steps: a. dissociation of the cell cluster constituting the sample into a suspension of whole and viable isolated cells, b. macroscopic sorting of the cells so as to obtain homogeneous subpopulations, c. calibration of at least one microwave electromagnetic sensor resonating at its own resonance frequency, d. presentation of the cells dissociated and sorted according to steps a. and b. on the at least one previously calibrated sensor, e. interrogation of the at least one sensor and determination of the new resonance frequency of said at least one sensor having received the cells, f. calculation of the variation in overall dielectric permittivity of the cells according to the variation in working frequency, which constitutes the electromagnetic signature of said cells. The macroscopic sorting is without prior labelling and is based on the intrinsic properties of the cells. The invention also covers a kit suitable for implementing the method.

IPC 8 full level

G01N 27/22 (2006.01); **G01N 22/00** (2006.01)

CPC (source: EP US)

G01N 22/00 (2013.01 - EP US); **G01N 27/221** (2013.01 - US); **G01N 33/4833** (2013.01 - EP US)

Citation (search report)

See references of WO 2015097419A1

Citation (examination)

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DOCDB simple family (application)

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