

Title (en)

METHOD FOR ANALYSIS OF SUBSTANCES IN TISSUE OR IN CELLS

Title (de)

VERFAHREN ZUR ANALYSE VON SUBSTANZEN IN GEWEBE ODER IN ZELLEN

Title (fr)

PROCEDE D'ANALYSE DE SUBSTANCES PRESENTES DANS DES TISSUS OU CELLULES

Publication

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Application

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Abstract (en)

[origin: WO0165254A2] An improved method for directly identifying a chemical structure of a substance present in tissue or cells of organisms is disclosed. In particularly, the method for directly identifying a chemical structure of a substance present in tissue or cells of various kind of organisms comprises the following steps: (1) a step irradiating a laser to a certain intracellular region of a sample tissue slice or a cell, and analyzing the generating mass ions to obtain mass spectrum of the substance present at the cite, (2) a step analyzing the mass spectrum to obtain a mass profile of the substance existing at the intracellular region of the sample tissue slice or in cell, and(3) a step determining the chemical structure of the substance corresponding a certain molecular weight appeared in the mass profile. The method of this invention is conducted by utilizing the combined techniques of matrix-assisted laser desorption/ionization time-of-flight mass spectrometry (MALDI-TOF MS), and on-line capillary reversed-phase HPLC/quadrupole orthogonal acceleration time-of-flight (Q-Tof)-MS, and molecular cloning, is disclosed.

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Citation (examination)

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