

Title (en)
DETECTION OF VARIATIONS IN THE DNA METHYLATION PROFILE

Title (de)
DETEKTION VON VARIATIONEN DES DNA-METHYLIERUNGSPROFILS

Title (fr)
DETECTION DE VARIATIONS DANS LE PROFIL DE METHYLATION DE L'ADN

Publication
EP 1278892 A1 20030129 (DE)

Application
EP 01940158 A 20010406

Priority
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Abstract (en)
[origin: DE10019058A1] A nucleic acid, (I), comprising a sequence of 18 bases, of a segment of chemically pretreated DNA (CP DNA) of genes associated with cell cycle having a sequence taken from 424 sequences (Ss) and sequences complementary to (Ss), is new. Independent claims are also included for the following: (1) an oligomer (II), particularly an oligonucleotide or peptide nucleic acid (PNA)-oligomer, comprising a base sequence having a length of at least 9 nucleotides which hybridizes to or is identical to a CP DNA of genes associated with the cell cycle having a sequence from (Ss); (2) a set of (II), comprising at least two (II); (3) use of a set of oligomer probes (III) for detecting the cytosine methylation state and/or single nucleotide polymorphisms (SNPs) in CP DNA; (4) manufacturing an arrangement of different oligomers (array) fixed to a carrier material for analyzing diseases associated with the methylation state of the CpG dinucleotides of CP DNA, where at least a (II) is coupled to a solid phase; (5) an arrangement of different oligomers (array), obtained by the method (4); (6) ascertaining (M1) genetic and/or epigenetic parameters for the diagnosis and/or therapy of existing diseases or the predisposition to specific diseases by analyzing cytosine methylations, comprising: (a) converting cytosine bases which are unmethylated at the 5-position (in a genomic DNA sample) to uracil or another base which is dissimilar to cytosine in terms of hybridization behavior, by chemical treatment; (b) amplifying fragments of the chemically pretreated DNA using sets of (II) as primers and a polymerase, the amplifies carrying a detectable label; (c) hybridizing the amplificate to a set of (II) or else to a DNA-and/or PNA-array; and (d) detecting the hybridized amplifies; and (7) a kit (IV) comprising a bisulfite (= disulfite, hydrogen sulfite) reagent as well as DNA- and/or PNA-oligomers. - ACTIVITY : Anti-HIV; neuroprotective; immunosuppressive; antitumor; cytostatic; antiarthritic; antiarteriosclerotic. - MECHANISM OF ACTION : Cytosine methylation regulator. No example is given.

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C12Q 1/68

IPC 8 full level
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