

Title (en)

LIGASE/POLYMERASE METHOD FOR DETECTING CYTOSINE METHYLATION IN DNA SAMPLES

Title (de)

LIGASE/POLYMERASE-VERFAHREN ZUR DETEKTION VON CYTOSIN-METHYLIERUNG IN DNA PROBEN

Title (fr)

PROCEDE DE LIGASE/POLYMERASE POUR DETECTER LA METHYLATION DE CYTOSINE DANS DES ECHANTILLONS D'ADN

Publication

EP 1261740 A1 20021204 (DE)

Application

EP 01915053 A 20010223

Priority

- DE 0100749 W 20010223
- DE 10010281 A 20000225

Abstract (en)

[origin: WO0162961A1] The invention relates to a method for detecting 5-methylcytosine in genomic DNA samples. Firstly, a genomic DNA from a DNA sample is chemically reacted with a reagent, whereby 5-methylcytosine and cytosine react differently. Afterwards, the pretreated DNA is amplified while using a polymerase and at least one primer. In the next step, the amplified genomic DNA is hybridized to at least two oligonucleotides, whereby the latter are assembled by inserting at least one oligonucleotide. In the case of the ligation product, a nucleotide carries a detectable tagging, and the lengthening is subject to the methylation status of the respective cytosine in the genomic DNA sample. In the following step, the lengthened oligonucleotides are examined for the presence of the tagging.

IPC 1-7

C12Q 1/68

IPC 8 full level

G01N 27/62 (2006.01); **C12N 15/09** (2006.01); **C12Q 1/68** (2006.01); **C12Q 1/6827** (2018.01); **G01N 33/53** (2006.01); **G01N 37/00** (2006.01);
C12Q 1/6834 (2018.01)

CPC (source: EP US)

C12Q 1/6827 (2013.01 - EP US); **C12Q 1/6834** (2013.01 - EP US); **C12Q 2600/158** (2013.01 - EP US)

C-Set (source: EP US)

1. **C12Q 1/6827 + C12Q 2561/125 + C12Q 2533/101 + C12Q 2525/186**
2. **C12Q 1/6827 + C12Q 2561/125 + C12Q 2531/113 + C12Q 2523/125**

Citation (search report)

See references of WO 0162961A1

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)

WO 0162961 A1 20010830; AU 2001242279 B2 20061026; AU 2006236059 A1 20061207; AU 4227901 A 20010903; CA 2401198 A1 20010830;
DE 10010281 A1 20010906; DE 10010281 B4 20050310; EP 1261740 A1 20021204; JP 2003523752 A 20030812; US 2003119025 A1 20030626;
US 7405040 B2 20080729

DOCDB simple family (application)

DE 0100749 W 20010223; AU 2001242279 A 20010223; AU 2006236059 A 20061117; AU 4227901 A 20010223; CA 2401198 A 20010223;
DE 10010281 A 20000225; EP 01915053 A 20010223; JP 2001561769 A 20010223; US 20496102 A 20021230