

Title (en)

METHOD AND KIT FOR THE DETECTION OF MUTATIONS IN DNA'S USING RESTRICTION ENZYMES

Title (de)

VERFAHREN UND KIT ZUR DETEKTION VON MUTATIONEN IN DNA'S MIT HILFE VON RESTRIKTIONSENZYMEN

Title (fr)

PROCEDE ET TROUSSE POUR LA DETECTION DE MUTATIONS DANS DES ADN A L'AIDE D'ENZYMES DE RESTRICTION

Publication

EP 0983379 A1 20000308 (DE)

Application

EP 97919050 A 19970910

Priority

- DE 19721327 A 19970521
- DE 19739612 A 19970909
- EP 9704955 W 19970910

Abstract (en)

[origin: WO9853098A1] The invention relates to a method for detecting DNA mutations using restriction enzymes. One condition to implement said method is that the cleaving performance of the selected restriction enzyme changes due to mutation. The relevant DNA segment in the genome containing the mutation is multiplied by means of polymerase chain reaction (PCR), wherein the primers used can each be labeled. The first primer enables the segment to be bonded to the surface of the carrier; the label of the second primer is used to enable detection. A restriction enzyme is incubated with the PCR amplicon, wherein the mutated segment is not cleaved if the cleavage site is suppressed by mutation. After the segments are bonded to the surface of the carrier, a detection reaction takes place, wherein the marking label of the second primer is removed in the wild type, insofar as it can be identified in the mutant. A plurality of labels enabling direct or indirect detection is possible. This provides a rapid method for detecting specific mutations in the genome without resorting to complex conventional methods.

IPC 1-7

C12Q 1/68

IPC 8 full level

C12N 15/09 (2006.01); **C12Q 1/68** (2006.01)

CPC (source: EP)

C12Q 1/683 (2013.01)

Citation (search report)

See references of WO 9853098A1

Designated contracting state (EPC)

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

DOCDB simple family (publication)

WO 9853098 A1 19981126; AU 4302297 A 19981211; AU 737771 B2 20010830; CA 2290510 A1 19981126; EP 0983379 A1 20000308; JP 2001525678 A 20011211; RU 2193069 C2 20021120

DOCDB simple family (application)

EP 9704955 W 19970910; AU 4302297 A 19970910; CA 2290510 A 19970910; EP 97919050 A 19970910; JP 54983598 A 19970910; RU 99127314 A 19970910