

Title (en)
PROCEDURE FOR RAPID DETERMINATION OF VIRUSES USING NUCLEIC ACID-BASED MOLECULAR DIAGNOSTICS, AND A KIT FOR THIS PURPOSE

Title (de)
VERFAHREN ZUR SCHNELLEN BESTIMMUNG VON VIREN MITTELS NUKLEINSÄUREBASIERTER MOLEKULARDIAGNOSTIK UND KIT HIERFÜR

Title (fr)
PROCÉDÉ DE DÉTERMINATION RAPIDE DE VIRUS À L'AIDE DE DIAGNOSTICS MOLÉCULAIRES BASÉS SUR DES ACIDES NUCLÉIQUES, ET TROUSSE POUR SA MISE EN OEUVRE

Publication
EP 2707496 A1 20140319 (EN)

Application
EP 11723198 A 20110511

Priority
HU 2011000045 W 20110511

Abstract (en)
[origin: WO2012153153A1] Procedure for rapid determination of viruses using nucleic acid-based molecular diagnostics, for the qualitative and quantitative determination of DNA viruses or RNA viruses in samples using multiplex real-time PCR technique, in the course of which in changeable genetic surroundings taxonomically characteristic stable consensus and unique variable nucleotide sequences are detected simultaneously. For this purpose single-stranded oligonucleotide probes containing palindromic motifs are created. In these palindromic motifs semi-degenerate bases are placed suiting the variable regions of the virus to be currently detected, favourably suiting the variable sequences expressed in numbers in the international professional protocols, and with the said semi-degenerate bases multiple internal loops are formed to ensure the structural flexibility of the probes. The bridge abutment-like close proximity of the multiple internal loops are provided with nucleotide sequences, with which the probes are bound on stable nucleotide sequences of the template to be detected, accessible in international genetic databases, via thermodynamically strong hybridisation. With this strong hybridisation the multiple internal loops are opened up, by flexibly spanning the variable regions around the stable template sequences the probes are bound to the variable sequences, and on the template to be detected a sequence of a length of at least 25-30 nucleotides bound in a thermodynamically stable and selective way is detected. The specification also relates to a KIT for the practical realisation of the procedure.

IPC 8 full level
C12Q 1/68 (2006.01); **C12Q 1/70** (2006.01)

CPC (source: EP)
C12Q 1/6851 (2013.01); **C12Q 1/701** (2013.01); **C12Q 1/703** (2013.01); **C12Q 1/706** (2013.01); **C12Q 1/707** (2013.01); **C12Q 1/708** (2013.01);
C12Q 2600/16 (2013.01)

Citation (search report)
See references of WO 2012153153A1

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)
WO 2012153153 A1 20121115; EP 2707496 A1 20140319

DOCDB simple family (application)
HU 2011000045 W 20110511; EP 11723198 A 20110511