Title (en)

DIRECT LYSIS BUFFER AND THE DETECTION OF HIV-1 PLASMA VIREMIA

Title (de)

EIN PUFFER ZUR DIREKTEN LYSE UND DIE FESTSTELLUNG DER HIV-1 PLASMA VIRÄMIE

Title (fr)

TAMPON DE LYSE DIRECTE ET DETECTION DE LA PRESENCE DE VIH-1 DANS LE PLASMA

Publication

EP 0698082 A1 19960228 (EN)

Application

EP 94915927 A 19940428

Priority

- US 9404676 W 19940428
- US 5862393 A 19930506

Abstract (en)

[origin: WO9426867A1] Immunocapture of plasma HIV-1, coupled with direct lysis of the virions and a simplified method of reverse transcription and amplification of the HIV-1 cDNA by the Polymerase Chain Reaction (PCR) represents a rapid and highly sensitive method to monitor HIV-1 disease progression. This method is also less time and labor intensive than quantitative culture. In addition, the development of a method to directly lyse the immunocaptured virions and a simplified single step reverse transcription (RT)/PCR procedure eliminated the need for organic solvent extraction and reduced the number of steps in the procedure. A direct lysis buffer was formulated to isolate plasma HIV-1 RNA for direct use in the RT and PCR reactions, thus eliminating the need for organic solvent extraction and ethanol precipitation. This resulted in a significant saving of time needed to complete the assay and significantly reduces the possibility of contamination associated with PCR reactions. The immunocapture-RT/PCR assay was used to show that vertical transmission of HIV-1 from a mother to her child depended largely on factors other that viral load. Conversely, the plasma viral load played a significant role in transfusion associated transmission of HIV-1 infection. Finally, the detection and quantitation of plasma associated viral load by immunocapture-RT/PCR may provide an additional marker of disease progression and may aid in determining the efficacy of various HIV therapeutics.

IPC 1-7

C11D 17/00; C12N 9/50

IPC 8 full level

C12N 9/50 (2006.01); **C11D 1/14** (2006.01); **C11D 3/386** (2006.01); **C12N 1/06** (2006.01); **C12N 15/10** (2006.01); **C12Q 1/68** (2006.01); **C12Q 1/6806** (2018.01)

CPC (source: EP)

C12N 1/06 (2013.01); **C12N 15/1003** (2013.01); **C12Q 1/6806** (2013.01)

Designated contracting state (EPC)

BE CH DE ES FR GB IT LI

DOCDB simple family (publication)

WO 9426867 A1 19941124; AU 6776994 A 19941212; CA 2161337 A1 19941124; EP 0698082 A1 19960228; EP 0698082 A4 19971217; JP H08510004 A 19961022

DOCDB simple family (application)

US 9404676 W 19940428; AU 6776994 A 19940428; CA 2161337 A 19940428; EP 94915927 A 19940428; JP 52547694 A 19940428