

Title (en)

NUCLEIC ACID AMPLIFICATION BY TWO-ENZYME, SELF-SUSTAINED SEQUENCE REPLICATION.

Title (de)

NUKLEINSÄUREAMPLIFIZIERUNG DURCH ZWEI-ENZYM, SELBSTTRAGENDE SEQUENZREPLIKATION.

Title (fr)

AMPLIFICATION D'ACIDES NUCLEIQUES PAR REPLICATION BI-ENZYMATIQUE AUTO-ENTRETEENUE DE SEQUENCES.

Publication

**EP 0572417 A4 19941123 (EN)**

Application

**EP 92901557 A 19911113**

Priority

- US 61268890 A 19901113
- US 9108488 W 19911113

Abstract (en)

[origin: WO9208800A1] Novel methods are provided for nucleic acid amplification by continuous, substantially isothermal, self-sustained sequence replication ("3SR") utilizing RNA-dependent DNA polymerase activity, DNA-dependent DNA polymerase activity, RNase H activity and DNA-dependent RNA polymerase activity. In one of the methods, before enzymatic activities can be provided by only two enzymes, a reverse transcriptase and a DNA-dependent RNA polymerase. The methods may employ two or three enzymes to provide the necessary enzymatic activities. Thus, in certain of the methods, an exogenous source of RNase H, such as E. coli RNase H, is employed in combination with a reverse transcriptase and a DNA-dependent RNA polymerase. In other of the methods of the present invention, reaction media are employed in which the inherent RNase H activity of retroviral reverse transcriptases is effective to provide high levels of amplification so that only two enzymes, reverse transcriptase and DNA-dependent RNA polymerase, are required. Novel compositions for carrying out the methods of the present invention are also provided.

IPC 1-7

**C12P 19/34**; **C12Q 1/68**; **C07H 15/12**; **C07H 17/00**

IPC 8 full level

**C12N 15/09** (2006.01); **C07H 21/00** (2006.01); **C12N 15/10** (2006.01); **C12P 19/34** (2006.01); **C12Q 1/68** (2006.01)

IPC 8 main group level

**C12Q** (2006.01)

CPC (source: EP)

**C12N 15/10** (2013.01); **C12Q 1/6865** (2013.01)

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- [PX] EP 0408295 A2 19910116 - GEN PROBE INC [US]
- See references of WO 9208800A1

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