Title (en)

METHODS FOR AMPLIFICATION OF GENOMIC DNA AND PREPARATION OF SEQUENCING LIBRARIES

Title (de

VERFAHREN ZUR AMPLIFIZIERUNG VON GENOMISCHEN DNA UND ERSTELLUNG VON SEQUENZIERUNGSBIBLIOTHEKEN

Title (fr)

PROCÉDÉS D'AMPLIFICATION D'ADN GÉNOMIQUE ET PRÉPARATION DE BANQUES DE SÉQUENÇAGE

Publication

EP 4100543 A1 20221214 (EN)

Application

EP 21703257 A 20210203

Priority

- EP 20155111 A 20200203
- EP 2021052521 W 20210203

Abstract (en)

[origin: EP3859012A1] The invention relates to a method of amplifying DNA of more than one samples for generating a sequencing library, the method comprising a.) providing for each of the more than one samples an individual reaction vessel comprising the DNA in single stranded form, b.) adding first primers to the reaction vessel to produce a reaction mixture, wherein the first primers comprise in a 5' to 3' orientation a constant sequence and a variable sequence, wherein the constant sequence comprises in a 5' to 3' orientation a first part with a sequence that can be common for the more than one samples and a second part with a sequence that is different for each of the more than one samples, c.) adding a DNA polymerase to the reaction vessel, d.) subjecting the reaction mixture to a temperature at which the first primers anneal to the single stranded DNA via the variable sequence, e.) subjecting the reaction mixture to a temperature at which the DNA polymerase extends the 3'-ends of the annealed first primers to produce first-round amplicons, f.) subjecting the reaction mixture to a temperature to produce single stranded amplicons, i.) subjecting the reaction mixture to a temperature at which the DNA polymerase extends the 3'-ends of the annealed first primers annealed to the single stranded DNA and to the first-round amplicons via the variable sequence, h.) subjecting the reaction mixture to a temperature at which the DNA polymerase extends the 3'-ends of the annealed first primers to produce first-round amplicons from first primers annealed to the provided DNA and second-round amplicons from first primers annealed to the provided DNA and second-round amplicons, repeating the steps (g)-(i) to produce second-round amplicons of the provided DNA.

IPC 8 full level

C12Q 1/6806 (2018.01); C12Q 1/6844 (2018.01)

CPC (source: EP)

C12Q 1/6806 (2013.01); C12Q 1/6844 (2013.01)

Citation (search report)

See references of WO 2021156295A1

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

Designated extension state (EPC)

BA ME

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

EP 3859012 A1 20210804; EP 4100543 A1 20221214; WO 2021156295 A1 20210812

DOCDB simple family (application)

EP 20155111 A 20200203; EP 2021052521 W 20210203; EP 21703257 A 20210203