Mar 22, 2021

Oxford Nanopore sequencing and library construction

Forked from Oxford Nanopore sequencing and library construction

In 1 collection

Rui Zhang[1]

[1]BGI-Qingdao, BGI-Shenzhen, Qingdao 266555, China

1 Works for me dx.doi.org/10.17504/protocols.io.btignkbw

BGI GIGA 1 more workspace

Hongling Zhou

SUBMIT TO PLOS ONE

ABSTRACT

This is a protocol for Oxford Nanopore sequencing and library construction, which was used in the humpback puffer genome sequence.

DOI

dx.doi.org/10.17504/protocols.io.btignkbw

PROTOCOL CITATION

Rui Zhang 2021. Oxford Nanopore sequencing and library construction. **protocols.io** https://dx.doi.org/10.17504/protocols.io.btignkbw

COLLECTIONS

Protocols for "Chromosome-level genome assembly of the humpback puffer, Tetraodon palembangensis"

FORK NOTE

FORK FROM

Forked from Oxford Nanopore sequencing and library construction, Hongling Zhou

CREATED

Mar 22, 2021

LAST MODIFIED

Mar 22, 2021

PROTOCOL INTEGER ID

48424

PARENT PROTOCOLS

Part of collection
Protocols for "Chromosome-level genome assembly of the humpback puffer, Tetraodon palembangensis"

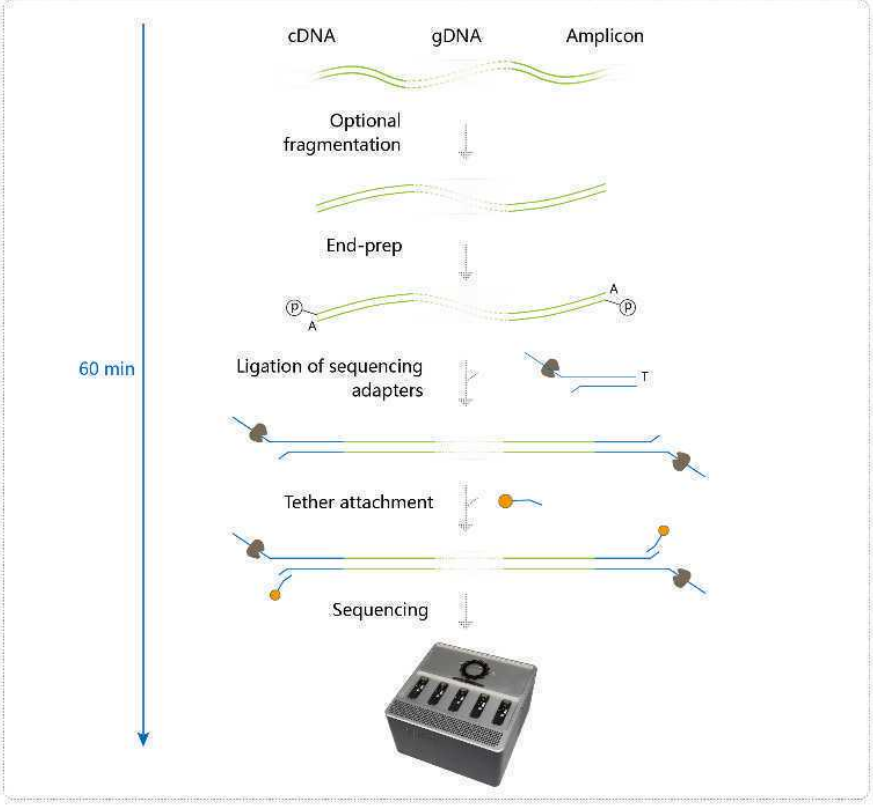
1 ONT Library preparation and Quality Control

1.1 After obtaining the qualified DNA, the large size fraction was selected by automated gel electrophoresis (BluePippin).

1.2 Next, the DNA was treated with the end-repair/dA tailing module.

1.3 After purification, adapter ligation was performed using ligation sequencing kit (LSK109, Oxford Nanopore Technologies).

1.4 Finally, DNA library was quantified by Qubit.

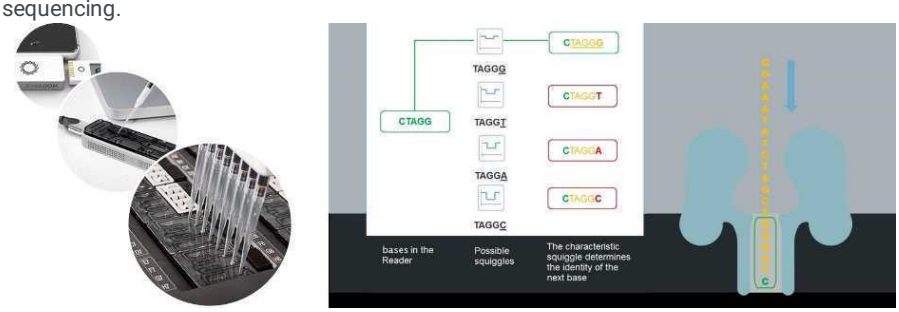


Library construction process

2 DNA Sequencing

Citation: Rui Zhang (03/22/2021). Oxford Nanopore sequencing and library construction. https://dx.doi.org/10.17504/protocols.io.btignkbw

2.1 A certain concentration and volume of DNA library was loaded onto a flow cell- PromethION cell R9.4.1, which was then transferred to Nanopore PromethION sequencer for real-time single molecule sequencing.



Nanopore single molecule real-time sequencing

Citation: Rui Zhang (03/22/2021). Oxford Nanopore sequencing and library construction. https://dx.doi.org/10.17504/protocols.io.btignkbw