Award

PromethION 24 Sequencing Unit PRO-SEQ024 and Consumables

THE UNIVERSITY OF BIRMINGHAM

F15: Voluntary ex ante transparency notice
Notice identifier: 2023/S 000-028333
Procurement identifier (OCID): ocds-h6vhtk-0403c5
Published 26 September 2023, 11:57am

Section I: Contracting authority/entity

I.1) Name and addresses

THE UNIVERSITY OF BIRMINGHAM

Edgbaston

BIRMINGHAM

B152TT

Contact

Kseniya Samsonik

Email

K.Samsonik@bham.ac.uk

Telephone

+44 1214146899

Country

United Kingdom

Region code

UKG31 - Birmingham

Companies House

RC000645

Internet address(es)

Main address

https://www.birmingham.ac.uk/index.aspx

Buyer's address

https://www.birmingham.ac.uk/index.aspx

I.4) Type of the contracting authority

Body governed by public law

I.5) Main activity

Education

Section II: Object

II.1) Scope of the procurement

II.1.1) Title

PromethION 24 Sequencing Unit PRO-SEQ024 and Consumables

Reference number

SC12009/23

II.1.2) Main CPV code

- 38000000 - Laboratory, optical and precision equipments (excl. glasses)

II.1.3) Type of contract

Supplies

II.1.4) Short description

Genomics Birmingham at the University of Birmingham is home to a diverse range of cutting-edge technologies dedicated to supporting the research endeavours of University of Birmingham (UoB) scholars and students. Our service laboratories, situated on Level 2 of the Institute of Biomedical Research (IBR) within the College of Medical and Dental Sciences (MDS), offer an array of resources and expertise.

One pivotal component of our service offerings is the utilization of Oxford Nanopore Technology sequencing platforms. These platforms distinguish themselves significantly from other sequencing technologies available within our service portfolio. Oxford Nanopore Technology stands out due to its unparalleled capacity to produce data outputs that are beyond the reach of any other sequencing technology, whether it is within our genomics service or external providers. We are currently equipped with the PromethION, MinION, and GridION platforms, allowing us to harness the full potential of this groundbreaking technology to benefit the research community at Genomics Birmingham.

II.1.6) Information about lots

This contract is divided into lots: No

II.1.7) Total value of the procurement (excluding VAT)

Value excluding VAT: £202,518

II.2) Description

II.2.3) Place of performance

NUTS codes

- UKG - West Midlands (England)

II.2.4) Description of the procurement

Our decision to source Oxford Nanopore Technologies for these sequencing platforms is founded on several irrefutable factors. Oxford Nanopore Technologies not only manufactures the instruments but also produces the necessary consumables, establishing them as the sole comprehensive source for our requirements. Moreover, the proprietary nature of their technology is affirmed by a series of patents, including WO2010/086622, WO2012/164270, WO2013/014451, WO2014/013260, WO2013/041878, WO2010/000789, US5795782A1, US6015714A1, US6362002B1, US7189503B2, EP0815438B1, EP1238275B1, and US8673556B2. We already have these sequencers in the laboratory and cannot purchase the required consumables for the equipment from any other provider. Oxford Nanopore are the sole providers of consumables and reagents for their sequencers.

This unique position of Oxford Nanopore Technologies as both manufacturer and patent holder translates into our sole reliance on them to provide not only the hardware and software components but also the indispensable consumables essential for the operation of these sequencing platforms. Their proprietary knowledge and technical expertise extend to servicing the equipment and offering invaluable guidance on resolving technical challenges, making them the unrivalled choice for our genomics service. No other company possesses the capability to furnish us with the complete suite of resources and support necessary to uphold the exceptional standards of research and innovation we strive to maintain at Genomics Birmingham.

Oxford Nanopore Technologies (ONT) holds a unique position in the genomics and sequencing industry for several reasons, which sets them apart from other companies and makes them the preferred choice for Genomics Birmingham:

Proprietary Technology: ONT's sequencing technology is proprietary and patented, as indicated by the list of patents provided. This means that they have exclusive rights to this innovative technology, giving them a competitive advantage. Other companies may use different sequencing technologies that may not offer the same advantages or capabilities.

Unique properties of Oxford Nanopore sequencing technologies are as follows:

• Benchtop instrument that can sequence native DNA from fragment sizes of 20bp to millions of bases for up to 24 independent samples gaining coverage of >30X per sample.

• Sequencing of native DNA and native RNA to give output files of modified BAMs and FASTQ files for 5mC and 5hmC methylation and canonical bases. This is performed in one sequencing run simultaneously with no need for additional manipulation of the DNA or RNA.

• Real-time sequencing, with real-time basecalling & alignment enabling

• Sequencing until a defined coverage is met and/or the ability to fix a run time for your sequencing requirements without the need for a default run time.

• Adaptive sampling (enrichment or depletion of known regions without any need for PCR or chemical pull down) this is also capable dynamically allowing targets where read depth is already met to stop sequencing so other targets can be covered.

• The same libraries can be run on all Oxford Nanopore instruments, for example, to perform library QC or generate additional data

• Possibility to perform a sequencing run, recover the library from the flow cell, and re-sequence to boost yield. Also the ability to wash and re-load the same flow cell enabling flexibility and maximum usage.

These properties are unique to Oxford Nanopore and not available from other providers.

Data Output: ONT's sequencing platforms, such as the PromethION, MinION, and GridION, are known for their ability to produce unique and extensive data outputs that can be critical for various research applications. The data quality and quantity achieved through ONT's technology may not be matched by alternatives.

The duplex chemistry provides around Q30 (99.9%) accuracy with the detection of modified bases at no extra cost or manipulation. Fragments of any size from 20bp upwards can be analysed in the same sequencing run, in real time. Adaptive sampling provides enrichment or depletion without the need for any other manipulation of the DNA or RNA. The P24 can run 24 flow cells independently of each other allowing for maximum flexibility.

II.2.11) Information about options

Options: No

Section IV. Procedure

IV.1) Description

IV.1.1) Type of procedure

Award of a contract without prior publication of a call for competition in the cases listed below

- The procurement falls outside the scope of application of the regulations

Explanation:

Our decision to source Oxford Nanopore Technologies for these sequencing platforms is founded on several irrefutable factors. Oxford Nanopore Technologies not only manufactures the instruments but also produces the necessary consumables, establishing them as the sole comprehensive source for our requirements. Moreover, the proprietary nature of their technology is affirmed by a series of patents, including WO2010/086622, WO2012/164270, WO2013/014451, WO2014/013260, WO2013/041878, WO2010/000789, US5795782A1, US6015714A1, US6362002B1, US7189503B2, EP0815438B1, EP1238275B1, and US8673556B2. We already have these sequencers in the laboratory and cannot purchase the required consumables for the equipment from any other provider. Oxford Nanopore are the sole providers of consumables and reagents for their sequencers.

IV.1.8) Information about the Government Procurement Agreement (GPA)

The procurement is covered by the Government Procurement Agreement: Yes

Section V. Award of contract/concession

Contract No

SC12009/23

Title

PromethION 24 Sequencing Unit PRO-SEQ024 and Consumables

A contract/lot is awarded: Yes

V.2) Award of contract/concession

V.2.1) Date of conclusion of the contract

26 September 2023

V.2.2) Information about tenders

The contract has been awarded to a group of economic operators: No

V.2.3) Name and address of the contractor/concessionaire

Oxford Nanopore Technologies plc

Gosling Building Edmund Halley Road, Oxford Science Park,

Oxford

OX4 4DQ

Country

United Kingdom

NUTS code

- UK - United Kingdom

Companies House

05386273

The contractor/concessionaire is an SME

No

V.2.4) Information on value of contract/lot/concession (excluding VAT)

Initial estimated total value of the contract/lot/concession: £202,518

Total value of the contract/lot/concession: £202,518

Section VI. Complementary information

VI.4) Procedures for review

VI.4.1) Review body

The University of Birmingham

Birmingham

B15 2TT

Country

United Kingdom