



**National Institute of Immunology**

**New Delhi-110067, INDIA**

Notification for Inviting proprietary purchase

Dated: 13.01.2025

NII is planning the procurement of the following item through proprietary mode.

Name of the item: Sequencer device

Make:- Oxford Nanopore

Model:- MinION

Any other firm with item meeting the below mentioned specification may contact to [equipment@nii.ac.in](mailto:equipment@nii.ac.in) latest by 28-01-2025 or send the quotation in two bid system

(technical and price separately)

### Specification of MinION MK1C Sequencer

Name of the Equipment/ Instrument: - **DNA / RNA Sequencer**

Make: **Oxford Nanopore Technology Ltd., U.K.**

Model: **MinION MK1C**

1. MinION MK1C is based on the advanced **Nanopore sensing** technology and involves direct molecular analysis of DNA/ RNA.
2. MinION MK 1C is **portable and has small footprint**, suitable for any lab and field application. Size and weight: H 30 mm x W 140 mm x D 114 mm; Wt 450 g.
3. MinION MK1C is entirely **self-contained** with **integrated high-definition touchscreen** and requires **no other computing resource**. It has latest generation GPU embedded analysis accelerator, 1 TB SSD Storage, 8 GB RAM, **Connectivity using WiFi, USB, MicroSD and Ethernet**. It comes with Pre-loaded software Linux OS, MinKNOW Core which operates the sequencing experiments and Guppy for analysis of data.
4. MinION MK1C is a **high through-put** sequencer that generate data output of **up to 30-40 Gb /run** with data streamed in **real time** for immediate analysis.
5. MinION MK1C reads the length from short to ultra-long (>4 Mb) reads with an average read length of 15Kb and above.
6. MinION MK1C can run Flongle or MinION Flow Cell with added advantage of **flow cell re-usability**.
7. MinION MK1C is compatible for **both DNA/ RNA based sequencing applications** such as whole genome sequencing, Targeted sequencing, Metagenomics (16S and Whole genome metagenome), RNA sequencing and Methylation with additional benefit of **Direct RNA sequencing and Methylation data** from whole genome sequence data without going for bisulphite conversion or additional library preparation protocol.
8. MinION MK1C includes options for flexible workflows, **PCR-free library** preparation protocols and multiplexing of up to 96 libraries in a single flow using barcodes.
9. The sequencer along with Flow cell, Ligation Sequencing kit, Control Expansion kit, flow cell wash kit.