

Oxford Nanopore launches Flongle for quick, smaller DNA/RNA sequencing tests

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Oxford Nanopore has made Flongle starter packs available to purchase, after initial testing in an early-access programme. Flongle introduces a new paradigm of smaller, on-demand DNA or RNA sequencing tests, with the potential to transform a range of applications where rapid insights are required at low cost.

Oxford Nanopore's goal is to enable the analysis of any living thing, by anyone, anywhere. Flongle is designed to bring this goal closer and to also allow low-cost sequencing at any time. With its compact format, Flongle opens up possibilities of on-demand testing in a broad range of locations, from scientific laboratories to farms and factories, healthcare settings, outdoor environments or classrooms.

Flongle is an adapter for the portable MinION and desktop GridION X5 sequencing devices. It uses the same core nanopore sequencing technology as other Oxford Nanopore devices, producing real-time data, direct sequencing and long reads. The small Flongle flow cells can currently produce as much as 1.8 Gb of sequence data with headroom for more than 3 Gb. This enables many sequencing experiment types, including small-genome sequencing, targeted panels/amplicon sequencing, metagenomics for the identification of viruses, bacteria or characterisation of microbiomes, or species ID. It can also be used for quality control for larger nanopore experiments.

At \$90 per flow cell, Flongle allows on-demand sequencing at an affordable price point, without needing to wait for the large batches of samples that are often required to achieve low per-test costs on traditional sequencing devices. The workflow is fast and simple, with library preparation in as little as ten minutes and real-time data analysis.