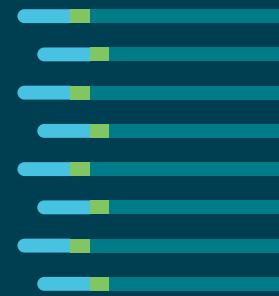


next generation sequencing



Neo offers high quality NGS with industry leading turnaround times.

We work with a variety of starting materials and offer user-defined coverage of a target region or total number of sample reads.

Combine with other DNA services from Neo to create a **Flexible Workflow**



Turnaround Time

OPTION	AVERAGE TAT (DAYS) *
Express (PE 150, PE 75)	1-2
Long Formats (PE 300, PE 250)	3-5
Special Formats (PE 100, PE 50)	2-5

Library Types

OPTION	DETAILS
High Throughput DNA Library Prep	Our proprietary high-throughput workflow can efficiently process thousands of samples per day and produce NGS libraries from small amounts of plasmid DNA, genomic DNA (<20Mbp genomes), PCR amplicons (>600bp), or RCA products
DNA Library Prep	On-bead DNA library prep provides reliable results for small (<20Mbp, e.g. yeast, bacteria) and large genomes (>20Mbp, e.g. human, mouse)
PCR-Free Library Prep	We produce NGS libraries from purified PCR products or restriction fragments without additional PCR amplification (*for fragments <600bp). UMIs available upon request
Amplicon Library Prep	Starting from plasmid DNA or PCR amplicons, we produce indexed amplicon PCR libraries that preserve the maximum amount of diversity present in the input DNA
Poly-A+ RNA Library Prep	We produce stranded, poly-A enriched RNA libraries for NGS starting with total RNA, cells frozen in TRIzol, or snap frozen cell pellets
IVT Library Prep	Starting from in-vitro transcribed (IVT) RNA, we produce an NGS library with full coverage across the entire transcript

Accepted Starting Material

SAMPLE	DETAILS
Purified Plasmid DNA	50 ng of purified plasmid DNA at a concentration of at least 5 ng/ μ l
Bacterial Colonies Carrying Plasmids	<ul style="list-style-type: none">• Colonies on agar• 100 μl colony water or saturated culture
PCR Product	100 ng per sample
Genomic DNA (microbial)	100 ng genomic DNA
Frozen Cells, Microbial WGS	1 ml of saturated overnight culture, spun down and frozen as a cell pellet (ship on dry ice)
Genomic DNA (large eg. human, mouse)	<ul style="list-style-type: none">• 5×10^6 frozen cells, or• 1000 ng genomic DNA
Dried Blood Spots On Cards	Whatman 903 Five Spot Blood Card (or similar)
Cells in TRIzol	1–3 million cells dissolved in TRIzol
Total RNA	1000 ng total RNA
Frozen Cells, RNA-seq	1–3 million cells snap-frozen (ship on dry ice)
Phage (Amplicon PCR only)	10 μ l phage stock
IVT Reaction Products	500 ng purified IVT RNA
SARS-CoV-2 Genome Sequencing	<ul style="list-style-type: none">• Primary Samples: 1ml patient sample in VTM (nasopharyngeal swabs) or• Purified Total RNA: minimum 15 μl RNA with viral load $Ct \leq 35$ by qPCR

Data Delivery

FASTQ files delivered seamlessly via web portal or cloud-based service



PLACING ORDERS AT NEO

To get started, please email a project description to sequencing@neochromosome.com