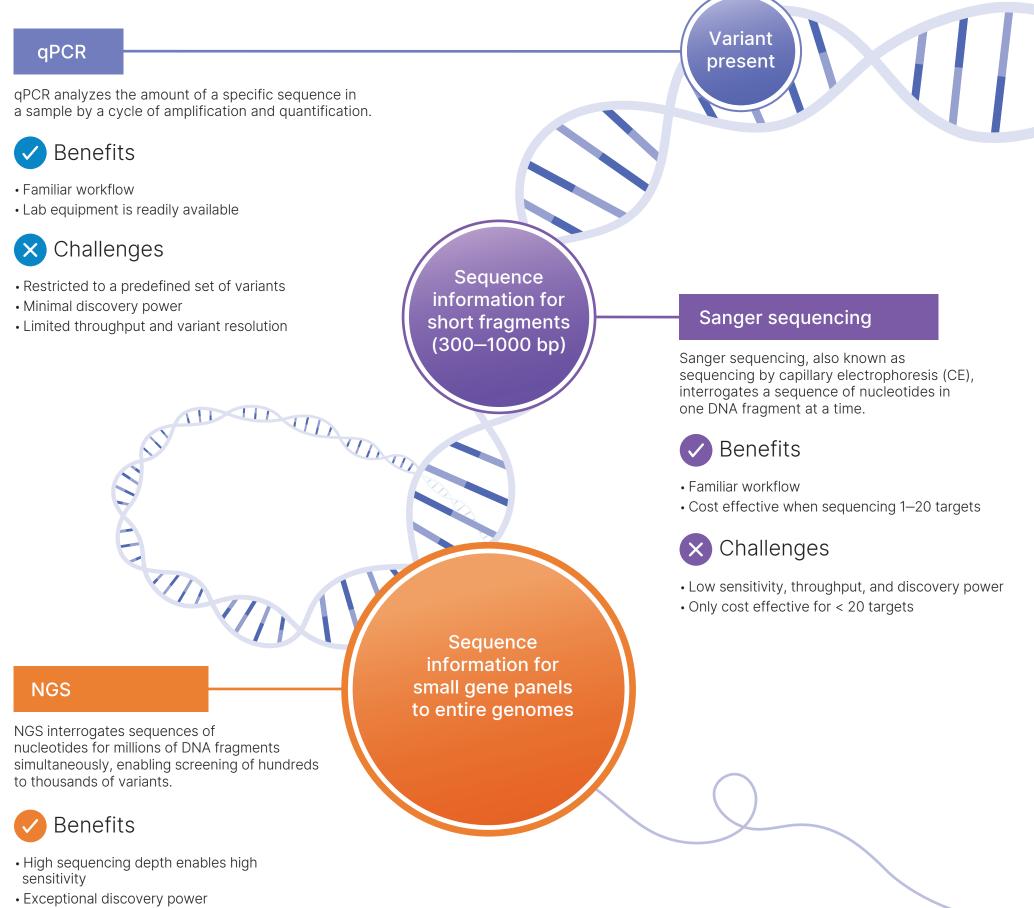
Comprehensive NGS versus qPCR and Sanger sequencing

In contrast to qPCR and Sanger sequencing, next-generation sequencing (NGS) can simultaneously identify variants across thousands of target regions down to single-base resolution in a single experiment. Explore the benefits and limitations of each method to understand which one meets your needs.¹⁻³



- Single-base variant resolution
- High-throughput workflows and large data sets

Sensitive detection of gene expression changes



 Possibly inefficient for simple detection of a low number of targets

References

1. Illumina. High-impact discovery through gene expression and regulation research. illumina. com/content/dam/illumina-marketing/documents/gated/gene-expression-profiling-e-book-web.pdf. Accessed February 7, 2024.

 Illumina. Advantages of next-generation sequencing vs. qPCR. illumina.com/science/ technology/next-generation-sequencing/ngs-vs-qpcr.html. Accessed February 7, 2024.
Illumina. Differences between NGS and Sanger Sequencing. illumina.com/science/technology/next-generation-sequencing/ngs-vs-sanger-sequencing.html. Accessed February 7, 2024.

Which to choose—and when?

Sanger sequencing and qPCR are good choices if you need to interrogate a small region of DNA on a limited number of samples.

Otherwise, NGS is more likely to suit your needs. For variant screening studies with a high number of samples, NGS is the most efficient and cost-effective approach for sequencing tens to thousands of targets compared to conventional methods.

Learn more about targeted NGS: illumina.com/ngs-explained

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