

# Find the method that's right for your research

Next-generation sequencing (NGS) allows researchers to explore genetic variations like never before – down to single nucleotide resolution. Whether you need to identify specific variants from a focused set of regions, or look more broadly for potential causative variations, whole exome sequencing (WES) or whole genome sequencing (WGS) both offer effective solutions.

Explore the benefits of these approaches to understand which method is best for your research.

## Whole Exome Sequencing

- Targeted view of the protein-coding regions of the genome
- Reliable and sensitive detection of coding variants (SNVs, Indels)
- Fast and cost effective sequencing

45 Mb

Average  
exome size

3.2 B

Billions of bases  
in the human genome

120 Gb

Data generated  
from 30x WGS

30x

Whole genome  
coverage required for  
99.9% sensitivity

8 Gb\*

Data generated for a  
100x WES sample

\*8Gb at 2 x 75

100x

Whole exome coverage  
required for 99.9% sensitivity

## Whole Genome Sequencing

- Comprehensive view of the genome (coding, non-coding and mtDNA)
- Reliable and sensitive detection of all variant types (SNVs, Indels, SVs, CNVs)
- Low cost, fast library preparation