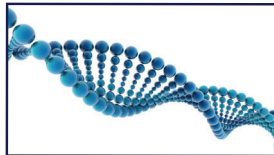


Reducing GC Bias in WGS: Moving Beyond PCR

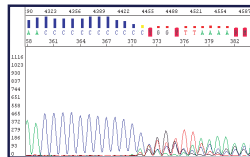
WGS is one of the most powerful techniques in understanding genomic variations. However, obtaining clean and accurate sequencing data can still be a problem, particularly for complex or degraded samples. The Invitrogen™ Colibri™ PCR-Free PS DNA Library Prep Kit for Illumina™ systems offers the ability to eliminate amplification from WGS library preparation workflow altogether and retain sample complexity.

Genomic content that influences WGS results

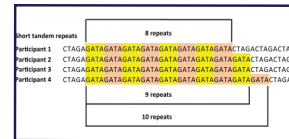
GC content



Homopolymeric regions



Short tandem repeats



Challenges with older library preparation technologies

- PCR is a common source of errors (can skew read coverage)
- Difficulty discerning GC bias from GC abundance (aka true biological signal)

Eliminate the need for amplification in WGS workflow



Invitrogen Colibri PCR-Free PS DNA library Prep Kit

- Achieve longer read lengths (median 350-550 bps)
- Obtain even read coverage throughout the genome