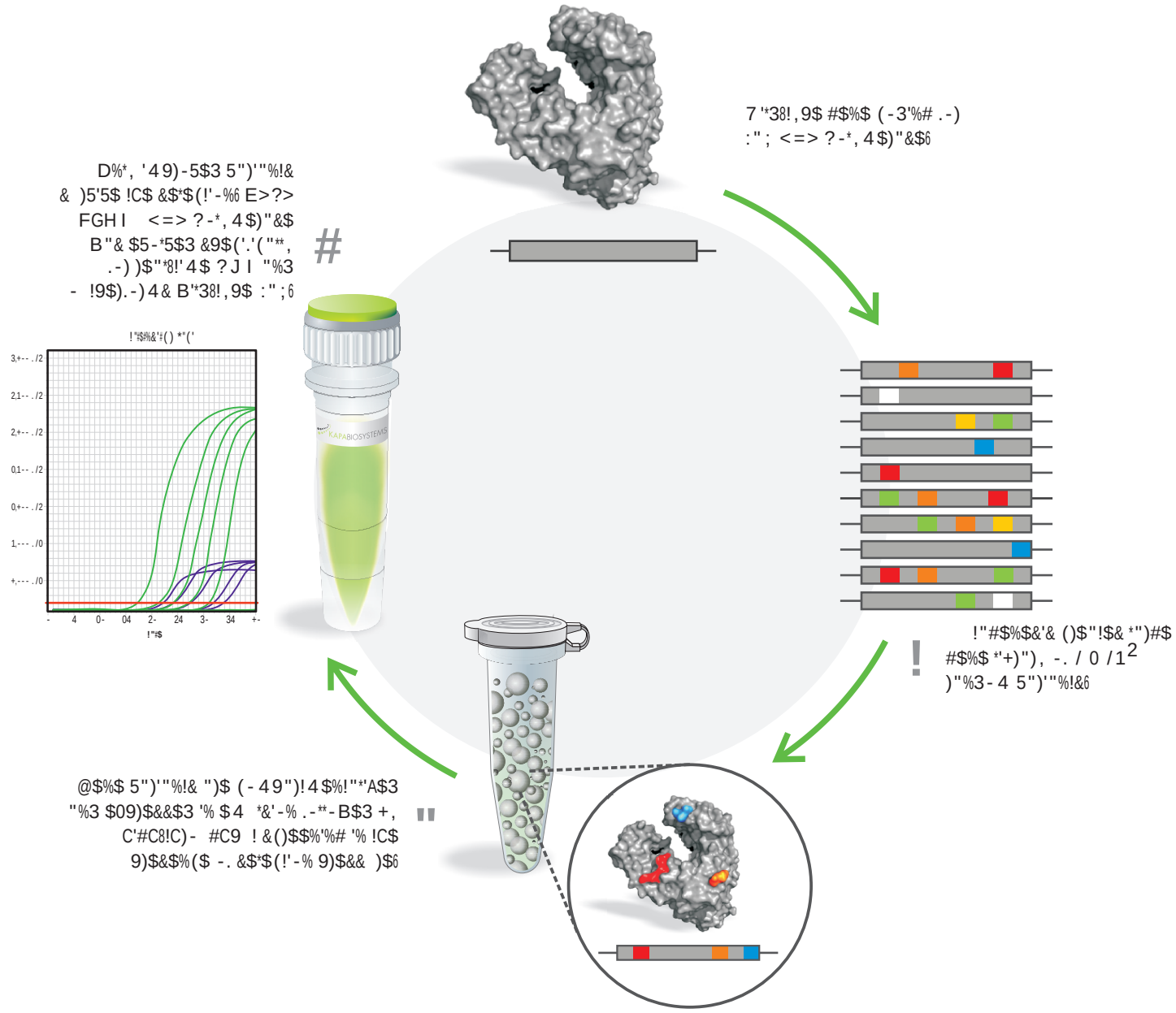
>> Our technology

Wild-type enzymes are transformed into engineered enzymes through a process of high-throughput molecular evolution.

The cumulative effects of small changes to protein structure signiýcantly limit the rational design of enzyme function. A preferred strategy for protein engineering involves simulating evolution in the laboratory. Large libraries of protein variants are screened through a speciýc functional selection pressure, only the enzymes with improved function survive for the next round of selection. Recent innovations in mutagenesis, *in vitro* genotype-phenotype linkage, and massively parallel screening assays have ýnally unlocked the potential of molecular evolution.

Kapa Biosystems is the only reagents supplier that offers a range of novel polymerases evolved speciýcally for applications such as real-time PCR/qPCR, high ýdelity PCR, fast PCR, robust PCR, crude sample PCR, long range PCR, next-generation DNA sequencing, and molecular diagnostics.

High-throughput molecular evolution.



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next generation thinking
in enzyme technology