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KURA

DeCodi-Fi

High-Fidelity Polymerase Kits

AFFORDABLE *HIGH-FIDELITY* POLYMERASE FOR LONG DNA AMPLIFICATION

KEY HIGHLIGHTS

- **Longer Fragments:** Amplifies fragments up to 23 kb and can extend to 44 kb with proper optimization.
- **High-Fidelity:** 64% reduction in error rates compared to KAPA HiFi.
- **Amplification efficiency:** Amplifies high-complexity DNA up to 0.1 ng template and medium-complexity DNA up to 5 pg. Suitable for low input and diverse DNA templates with GC content ranging from 25% to 85%.
- **Low Bias and High Specificity:** Ensures consistent results across various DNA samples, with GC content ranging from 32% to 73%, providing high specificity and yield even with challenging templates.
- **Compatibility with Magnetic Beads:** Maintains performance with up to 300 µg of Sera-Mag™ Carboxylate-Modified Magnetic Beads and 200 µg of Sera-Mag™ Streptavidin-Coated Magnetic Beads.
- **Simplified Workflow and Automation Compatibility:** Streamline your workflow with robust performance on GC-rich targets, DNA of suboptimal purity, and long sequences, compatible with automated processes.

THE MOST AFFORDABLE HIGH-FIDELITY IN THE MARKET

DeCodi-Fi High-Fidelity Polymerase Kits, featuring our **meticulously engineered hot-start DeCodi-Fi High-Fidelity DNA Polymerase,** ideal for DNA Library Amplification and PCR applications. This polymerase excels at amplifying complex DNA populations with **unparalleled fidelity, efficiency, and minimal bias.** It ensures enhanced coverage and yield across challenging regions, including GC- and AT-rich areas.

DeCodi-Fi is **approximately 50% more affordable** than other high-fidelity polymerases, providing substantial savings while maintaining superior performance.

DeCodi-Fi
All-in-One Mix

The All-in-One Mix format provides our hotstart high-fidelity polymerase in a user-friendly 2X MasterMix configuration. This format includes all the necessary components for the reaction (dNTPs, MgCl2, and stabilizers), excluding primers and template, in a proprietary buffer.

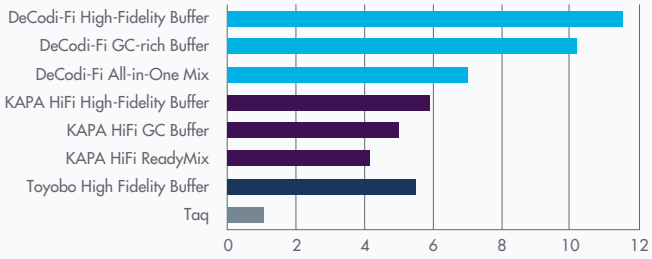
DeCodi-Fi
High-Fidelity PCR Kit

The High-Fidelity PCR Kit provides our hotstart high-fidelity polymerase and all the necessary components for the reaction separately for greater flexibility. It includes two buffers: a 5X High-Fidelity Buffer recommended for amplifying most templates which have balanced GC/AT content, and a 5X GC-rich Buffer recommended for amplifying GC-rich targets.

HIGH-FIDELITY

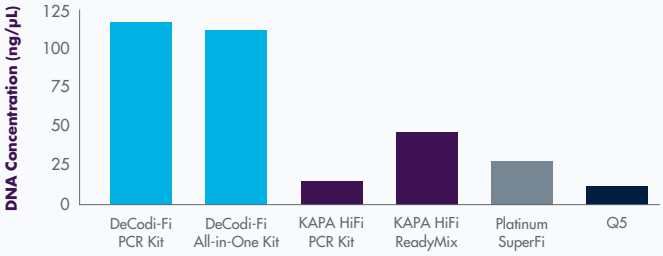
DeCodi-Fi High-Fidelity Polymerase exhibits a **64% reduction in error rates** compared to Kapa HiFi.

Fidelity compared to Taq



Comparison of DeCodi-Fi, KAPA HiFi and Toyobo HiFi, measured in terms of fold improvement over Taq polymerase, based on Illumina libraries of the complete E. coli genome.

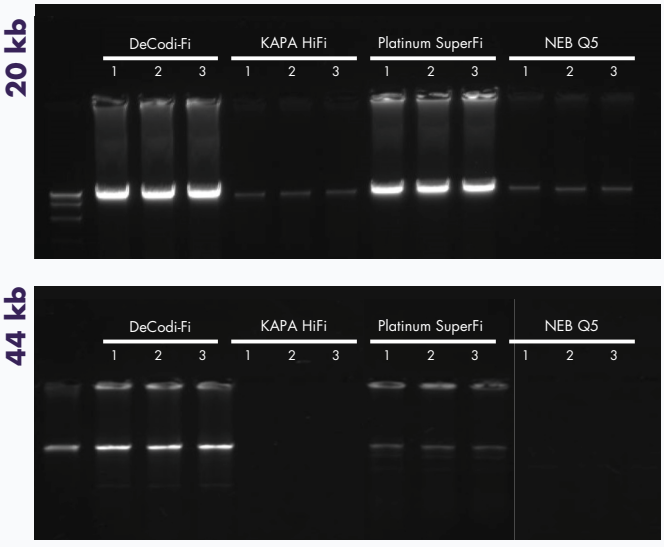
HIGH YIELD



DNA concentration obtained from 25 µL of lambda 15 kb PCR reaction using DeCodi-Fi PCR kit, DeCodi-Fi All.in-One Mix and competitors enzymes (KAPA HiFi, Platinum SuperFi and Q5). The experiment was run in triplicate.

LONG AMPLIFICATION & HIGH YIELD

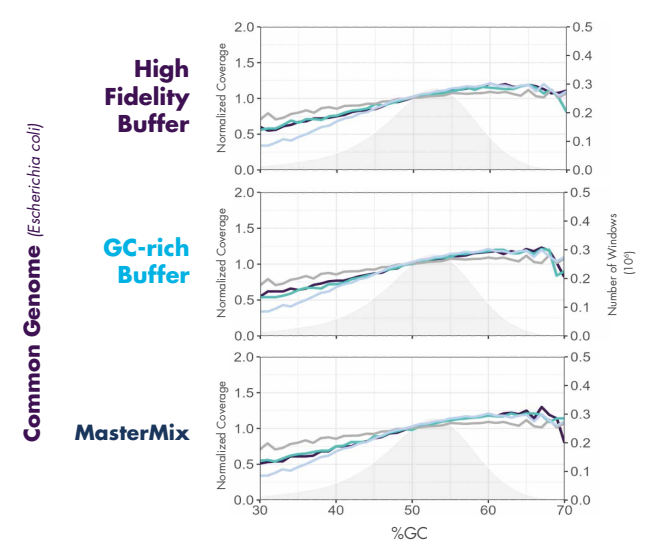
Maximize target yield with high-efficient amplification, even with fragments size up to 44 kb of length.

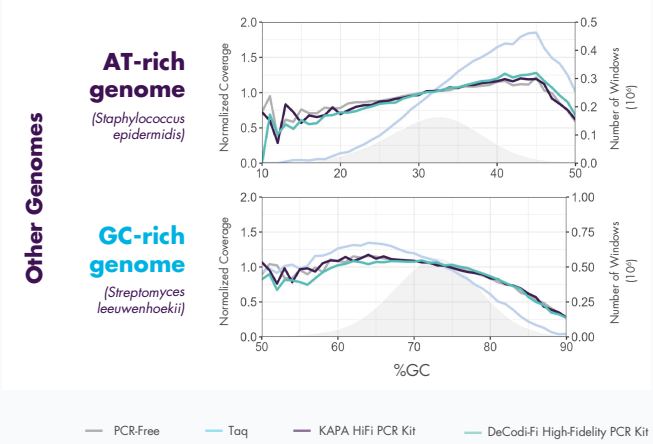


Amplification of lambda DNA fragments 20 kb and 44 kb with DeCodi-Fi High-Fidelity Polymerase, Kapa HiFi, Platinum SuperFi and Q5. Each target was amplified from low input (1ng) Reactions were performed following the optimized conditions for each enzyme and using 24 cycles. The experiment was run in triplicate.

SEQUENCE COVERAGE

Ensures low bias amplification, even using different buffers and in AT-rich or GC-rich fragments, guaranteeing a more uniform coverage and improved sequencing depth.





Illumina libraries prepared from a common genome (*Escherichia coli*) were amplified using Taq polymerase, KAPA HiFi PCR Kit and DeCodi-Fi High-Fidelity PCR kit (left). Illumina libraries prepared from an AT-rich genome (*Staphylococcus epidermidis*) and a GC-rich genome (*Streptomyces leeuwenhoekii*) were amplified using Taq polymerase, KAPA HiFi PCR Kit and DeCodi-Fi High-Fidelity PCR kit (right).

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CATALYZING MULTI-OMICS EVOLUTION THROUGH *SMART ENZYMATIC DESIGN*

Blikka Genomics, the newest division of Kura Biotech, operates in the fields of DNA sequencing and controlled enzymatic synthesis. Guided by our vision to catalyze multi-omics evolution through smart enzymatic design, and leveraging Cantera, our state-of-the-art protein engineering platform, Blikka develops high-performance products that drive scientific breakthroughs.

A LEGACY OF EXCELLENCE

For over a decade, Kura Biotech has set industry standards in enzyme solutions, particularly in toxicology. Blikka Genomics extends this legacy into genomics and multi-omics, leveraging deep expertise to provide precision-engineered tools for groundbreaking research.

PRECISION THROUGH CANTERA

At the heart of Blikka Genomics capabilities is Cantera, our advanced protein engineering platform. Combining over 11 years of experience with data-driven insights, Cantera structures the protein engineering process to optimize and measure each stage, ensuring efficient production and delivery of final products.

Blikka Genomics commitment to precision, innovation, and sustainability ensures researchers have the tools they need to achieve significant advancements in precision medicine and genomics. ***Join us in catalyzing multi-omics evolution through smart enzymatic design.***

WANT TO KNOW MORE?

Contact us at **sales@blikka.com** or visit **www.blikka.com**

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