

repliQa HiFi ToughMix

Superior speed and inhibitor tolerance for DNA amplification requiring high fidelity

FEATURES AND BENEFITS:

- Fidelity of >90x wild type *Taq*
- 2–3x faster PCR results with extension rates as fast as 1sec/ kb*
- Tough Tested – tolerant to a wide range of PCR inhibitors
- Superior yield and sensitivity
- Amplification of targets up to +24 kb gDNA and +40 kb λ DNA

DESCRIPTION:

The repliQa HiFi ToughMix is a 2x, ready-to-use solution that contains all the components for high fidelity PCR amplification, including a genetically modified DNA polymerase coupled with hot start antibodies.

This unique, next generation master mix provides >90x higher fidelity compared to *Taq*, while reducing time to PCR results by 2–3x. The extreme speed is enabled by extension times as fast as 1–10 sec/kb depending on target length. The enzyme is coupled with the industry leading ToughMix which is tolerant to a wide variety of inhibitors making it suitable for routine PCR, cloning, amplicon sequencing and site directed mutagenesis.

Tough Tested: Tolerant to a wide range of PCR inhibitors

repliQa HiFi ToughMix is able to tolerate a wide range of common PCR inhibitors, allowing for amplification of crude or difficult PCR sample types.

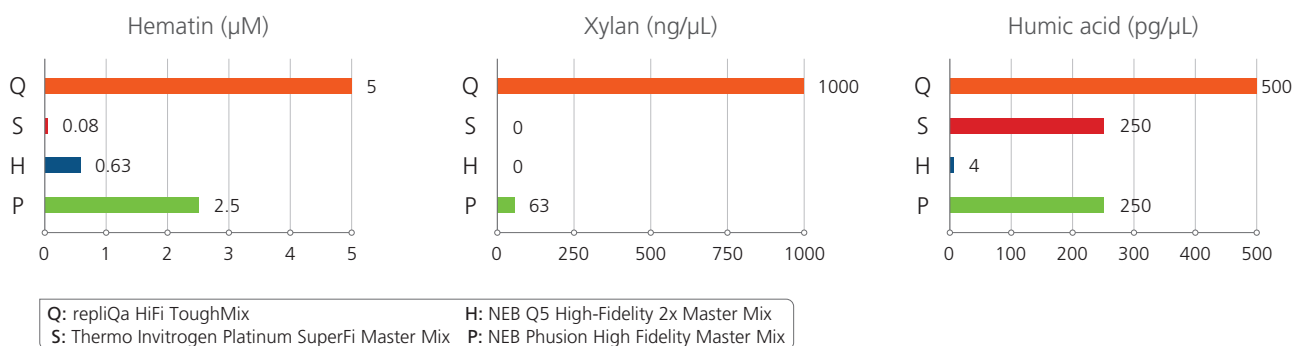


Figure 1 Strong Inhibitor Resistance. A 2 kb λ DNA template was amplified using each manufacturer's recommended cycling conditions with different amounts of inhibitors. The experiment was run in duplicate.

* For fragments less than 1 kb in size.

Superior Yield and Sensitivity

repliQa HiFi ToughMix provides higher yield and sensitivity, highlighting the enzyme efficiency. Coupled with extreme amplification speed allows PCR products to be amplified earlier and detected at lower levels.

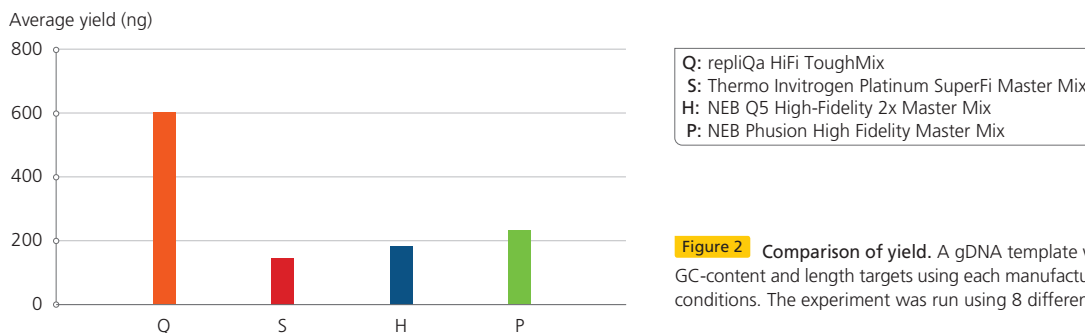


Figure 2 Comparison of yield. A gDNA template was amplified with varying GC-content and length targets using each manufacturer's recommended cycling conditions. The experiment was run using 8 different targets, in duplicate.

Long Amplification and Consistent GC Tolerance

repliQa HiFi ToughMix has the versatility to effectively amplify both short and long fragments. Effective amplification at varying levels of GC-content targets (27%–79% GC-content) enables superior PCR performance.

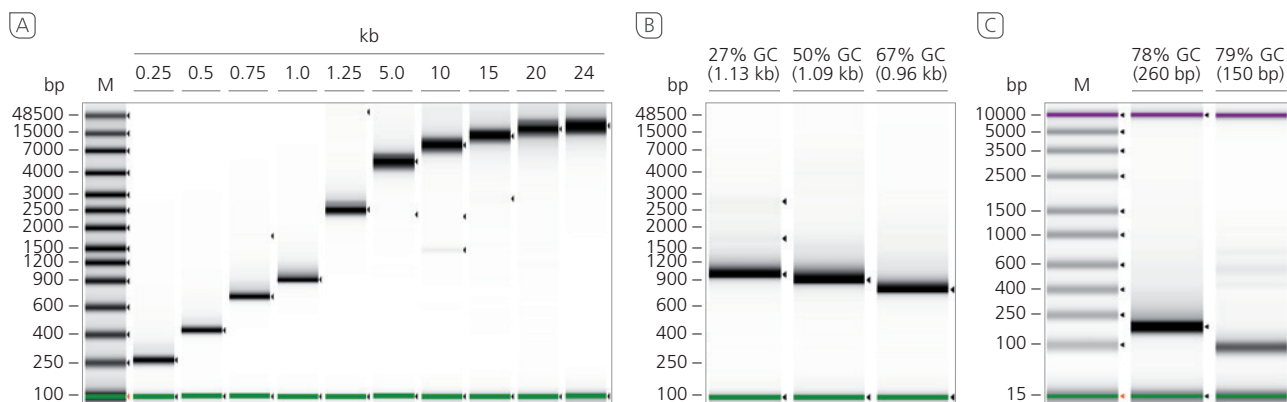


Figure 3 **A** Long Range Capabilities. A range from 0.25 to 24 kb of gDNA templates were amplified with varying GC-content and lengths using recommended cycling conditions. **B/C** Wide GC-content tolerance range. gDNA templates were amplified with varying GC-content and lengths using recommended cycling conditions.

ORDER INFO

Product Name	Quantabio Catalog Number	Size
repliQa HiFi ToughMix - 25	95200-025	25 rxns
repliQa HiFi ToughMix - 100	95200-100	100 rxns
repliQa HiFi ToughMix - 500	95200-500	500 rxns

Quantabio products are intended for molecular biology applications. The products are not intended for the diagnosis, prevention or treatment of a disease.
MK-SF-0034 REV 04 repliQa HiFi TM 1024