



exTEN II PCR Master Mix

exTENsively Amplifies Up to 10kb

exTEN II is an unique premixed blend of *Taq* DNA polymerase, a proof reading enzyme, dNTPs, MgCl2 and reaction buffer for amplification of DNA templates by PCR. With the addition of a 3' 5' exonuclease (proofreading) ability, the amplification efficiency is enhanced through a lower rate misincorporated nucleotides compared to just Tag DNA Polymerase.

exTEN II PCR Master Mix produces higher yield and amplifies longer fragments up to 10kb. Most of the amplified DNA fragments have 3'A overhang, while a small percentage are blunt-end. This premix formulation saves times and reduces contamination by reducing the number of pipetting steps for PCR setup. **exTEN II** PCR Master Mix consists of a density reagent and 2 tracking dyes which migrates at the same rate as a 4000bp and 50bp DNA fragment in a 1% agarose gel.

High Yield & Robust Amplification

Greater Sensitivity

Minimum Pipetting Steps Required

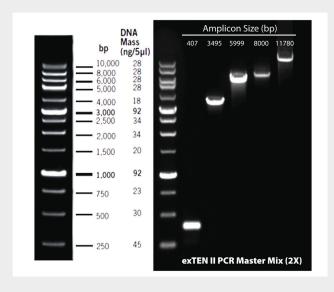
Specifications

Fidelity	1X	
Amplification length	Up to 10 kb	
Overhang	Mix of sticky & blunt ends	
Polymerase	Taq II DNA Polymerase & proof-reading enzyme	
Amplification Speed	30s-60s/kb	

Superior Yield & Robust Amplification of DNA Fragments Up to 10kb

DNA Fragments across different targets from a human genomic DNA were amplified with exTEN II PCR Master Mix and other commercial polymerases.

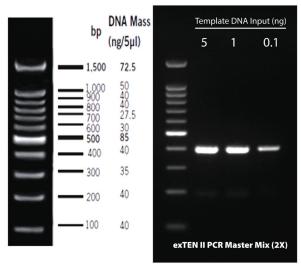
In comparison to the other polymerases, amplification of target at 10kb and beyond with **exTEN II** was still achievable with superior yield.



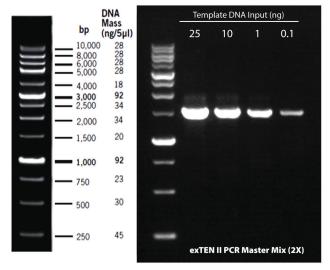
Greater Sensitivity Achieved

even in Low Concentration of DNA Template

Amplification of DNA fragment on different amount of DNA templates is shown below. **exTEN II** produced better results in terms of sensitivity among the other polymerases.



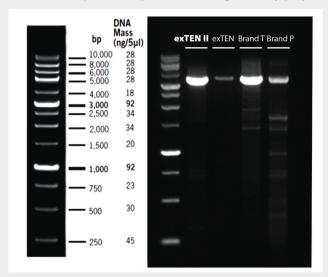
(A) Amplification of a 407bp fragment from plasmid DNA on different amount of DNA templates starting from 5ng to 0.1ng is shown above.



(B) Amplification of 1500bp fragment from bacteria DNA on different amount of DNA templates starting from 25ng to 0.1ng.

Superior Performance

Amplification showed better yield and efficiency against conventional Taq and Comparable with high-fidelity polymerase.



Amplification of a 3495bp fragment from human genomic DNA using

- (1) exTEN II PCR Master Mix
- (2) Conventional Tag
- (3) Brand T
- (4) Brand P

Convenient & Ease of Handling Shortened Preparation Time

exTEN II is a premix containing all necessary components including MgCl2, buffer, loading dyes & dNTPs in a single tube. It only requires addition of template, primers and $water\ prior\ to\ PCR\ cycling.\ Direct\ loading\ of\ PCR\ products\ onto\ gel\ is\ performed\ without$ any additional steps thereafter.



E: ExactMark 1kb DNA Ladder X: exTEN II PCR Master Mix (2x)

Product Information

Product	Product Decription	Product No.
exTEN II ———	exTEN II PCR Master Mix, 200 reactions	BIO-5188-200
	exTEN II PCR Master Mix, 1000 reactions	BIO-5188-1000



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