



ti polymerases series

EUR_X[®]
MOLECULAR
BIOLOGY
PRODUCTS

Application	Polymerase	Cat. No.	Proof-reading Activity	5'-3' Exonuclease Activity	Extra A Addition	Direct Gel Loading	Max. Genomic Product Size	Max. Episomal Product Size	Fidelity (vs Taq)
Hot Start PCR	tiTaq DNA Polymerase	E2715		●	●	●	<4kb	<10kb	1x
	tiOptiTaq DNA Polymerase	E2725	●	●	●	●	<12kb	<20kb	3x
	tiPfuPlus! DNA Polymerase	E1119	●				<3kb	<20kb	10x
	tiHybrid DNA Polymerase	E2940	●				<12kb	<20kb	10x
	tiAmplus DNA Polymerase	E2930	●	●	●		<25kb	<40kb	10x
High Fidelity PCR	tiPfuPlus! DNA Polymerase	E1119	●				<3kb	<20kb	10x
	tiHybrid DNA Polymerase	E2940	●				<12kb	<20kb	10x
Fast PCR	tiHybrid DNA Polymerase	E2940	●				<12kb	<20kb	10x
Difficult templates, GC - rich templates	tiOptiTaq DNA Polymerase	E2725	●	●	●	●	<12kb	<20kb	3x
	tiPfuPlus! DNA Polymerase	E1119	●				<3kb	<20kb	10x
	tiHybrid DNA Polymerase	E2940	●				<12kb	<20kb	10x
Long-range PCR	tiAmplus DNA Polymerase	E2930	●	●	●		<25kb	<40kb	10x
Site-directed mutagenesis	tiPfuPlus! DNA Polymerase	E1119	●				<3kb	<20kb	10x

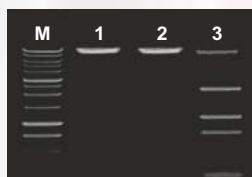


Fig.1 PCR amplification using EURx tiTaq DNA Polymerase. 6.9 kb amplicon of *Bacillus* phage DNA was amplified with tiTaq DNA Polymerase. Reactions were incubated at 25°C for 30 minutes before amplification. **Lane M:** molecular size marker – EURx Perfect Plus™ 1 kb DNA Ladder (E3131). **Lanes 1, 2:** PCR amplification reactions using 1.25 U tiTaq DNA Polymerase, Pol Buffer B and 0.2 mM dNTPs in 50 µl reaction volume. **Lane 3:** PCR amplification reaction using 1.25 U Tag DNA Polymerase (E2500), Pol Buffer B and 0.2 mM dNTPs in 50 µl reaction volume.

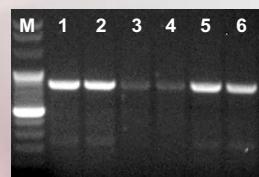


Fig.3 PCR amplification using EURx tiPfuPlus! DNA Polymerase. 0.82 kb amplicon of the human b-globin gene was amplified using EURx tiPfuPlus! DNA Polymerase, 10 x Pfu Buffer and 0.2 mM dNTPs in 50 µl reaction volume. **Lane M:** molecular size marker – Perfect™ 100 bp DNA Ladder (E3131). **Lanes 1, 2:** PCR amplification reactions using 2.5 U tiPfuPlus! DNA Polymerase. Reactions were incubated 30 min at 25°C before PCR. **Lanes 3, 4:** PCR amplification reactions using 2.5 U PfuPlus! DNA Polymerase. Reactions were incubated 30 min at 25°C before PCR. **Lanes 5, 6:** PCR amplification reactions using 2.5 U PfuPlus! DNA Polymerase. Reactions were set up on ice.

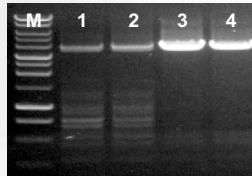


Fig.2 PCR amplification using EURx tiOptiTaq DNA Polymerase. 4 kb amplicon of the human b-globin gene was amplified using EURx tiOptiTaq DNA Polymerase, 10 x Pol Buffer B and 0.2 mM dNTPs in 50 µl reaction volume. **Lane M:** molecular size marker- Perfect Plus™ 1 kb DNA Ladder (E3131). **Lanes 1, 2:** PCR amplification reactions using 1.25 U OptiTaq DNA Polymerase. Reactions were incubated 30 min at 25°C before PCR. **Lanes 3, 4:** PCR amplification reactions using 1.25 U tiOptiTaq DNA Polymerase. Reactions were incubated 30 min at 25°C before PCR.

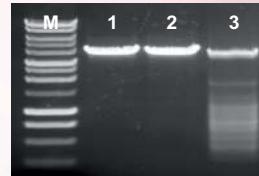


Fig.4 PCR amplification using EURx tiHybrid DNA Polymerase. 4 kb amplicon of the human b- globin gene was amplified using EURx tiHybrid DNA Polymerase, 10 x Hybrid Buffer and 0.2 mM dNTPs in 50 µl reaction volume. **Lane M:** molecular size marker – Perfect Plus™ 1 kb DNA Ladder (E3131). **Lanes 1, 2:** PCR amplification reactions using 1 U tiHybrid DNA Polymerase. Reactions were incubated 30 min at 25°C before PCR. **Lane 3:** PCR amplification reaction using 1 U Hybrid DNA Polymerase. The reaction was incubated 30 min at 25°C before PCR.