

Application guide

	Taq DNA Polymerase	Glycerol-free Taq DNA Polymerase	Red Taq DNA Polymerase	Taq Plus 2X Master Mix	Taq DNA Polymerase Master Mix	Red Taq DNA Polymerase Master Mix	TEMPase Hot Start DNA Polymerase	Glycerol-free TEMPase Hot Start DNA Polymerase	TEMPase Hot Start Master Mix K + C	Blue TEMPase Hot Start Master Mix K + C	GC-rich DNA Target kit	GC TEMPase Master Mix I + II	Multiplex TEMPase Master Mix	Fast Extract Genotyping PCR Kit	Fast HiFi DNA Polymerase	Fast HiFi DNA Polymerase 2X Master Mix
Application	Standard PCR						Hot Start PCR				Special PCR			Hi Fi PCR		
Routine PCR	x		x	x	x	x	x		x	x						
High throughput	x	x	x	x	x	x	x	x	x	x						
Automation		x						x						x		
GC-rich DNA templates							x	x	x	x	x	x			x	x
Long range															x	x
Multiplex PCR							x	x					x			
Sequencing															x	x
Genotyping	x			x	x	x	x	x	x	x			x	x		
Cloning	x						x								x	x
Mutagenesis															x	x
Freeze-drying		x						x								
Low abundance targets							x	x	x	x	x	x	x			
Forensics													x			
DNA fingerprinting													x			
Colony PCR	x		x	x	x	x	x	x	x	x	x	x				
Gene expression							x	x	x	x	x	x				
Microbial/pathogen detection							x	x	x	x	x	x	x			
SNP analysis															x	x
NGS applications															x	x
Product example	733-1301	733-1817	733-1323	733-2598	733-2546	733-2542	733-1331	733-2555	733-2581	733-2584	733-2567	733-2561	733-2568	733-2878	733-2880	733-2884

X: Recommended

X: Suitable

Technical guide

	Taq DNA Polymerase	Glycerol-free Taq DNA Pol.	Red Taq DNA Pol.	Red Taq DNA Pol. MM	Taq DNA Pol. MM	Taq Plus MM	TEMPase Hot Start Pol.	Glycerol-free TEMPase Hot Start DNA Pol.	TEMPase Hot Start Pol. MM	Blue TEMPase Hot Start MM	GC-rich DNA Target kit	GC TEMPase MM I +II	Multiplex TEMPase MM	HiFi DNA Polymerase	HiFi DNA Polymerase MM
Feature	Standard PCR						Hot Start PCR				Special PCR			Hi Fi PCR	
Direct gel loading			x							x					
Pipetting visualisation			x	x		x				x					
Long range														x	x
Proof reading activity														x	x
dUTP incorporation	x	x	x	x	x	x	x	x	x	x	x	x	x		
3'- A overhang	x	x	x	x	x	x	x	x	x	x	x	x	x		
Technical data															
Fidelity versus Taq	1X						1X				>1X			>60X	
Amplicon size	≤5 kb					≤3 kb	≤5 kb				≤5 kb			18 kb	≤ 11kb
Elongation speed	35 – 100 nt/s						35 – 100 nt/s				35 – 100 nt/s			100 nt/s	
Processivity	60 nt						60 nt				60 nt			200 nt	
5'-3' exonuclease activity	x						x				x				
Performance															
Specificity	+	+	+	++	+	+	++	++	++	++	++	++	++	++	++
Sensitivity	+	+	+	+	+	+	++	++	++	++	++	++	++	+	+
Yield	++	++	++	++	++	++	++	++	++	++	++	++	++	+	+

+: high ++: very high +++: excellent