

PCR Polymerases 一覽表

Polymerase	Cat. #	Product Size λ DNA	Product Size Human gDNA	Yield	Fidelity	Proofreading Activity	Specificity	GC-Rich T emplates	Hot-Start PCR	2X Premix	Dye Added	Processing Speed (per/kb)	TA Cloning (3'-A overhang)
Standard PCR													
TaKaRa Taq™ DNA Polymerase	R001A	≤12 kb	≤4 kb	++	1 X Taq**	X	++	+	X (HS 版本 : R007A)	X (Premix 版本 : R004A) (Premix HS 版本 : R028A)	X	1 min	O
EmeraldAmp® GT PCR Master Mix	RR310A	≤12 kb	≤4 kb	++	1 X Taq**	X	++	+++	X	O	O	1 min	O
High-yield PCR													
Titanium® Taq DNA Polymerase*	639208	≤2 kb	≤2 kb	++++	1 X Taq**	X	++++	++	O	X	X	1 min	O
Advantage 2 Polymerase Mix*	639201	≤18 kb	≤6 kb	++++	3 X Taq**	O	++++	++	O	X	X	1 min	O
TaKaRa Ex Taq® DNA Polymerase	RR001A	≤30 kb	≤20 kb	++++	4.5 X Taq**	O	++	+	X (HS 版本 : RR006A)	X (Premix 版本 : RR003A) (Premix HS 版本 : RR030A)	X	1 min	O
EmeraldAmp® MAX PCR Master Mix	RR320A	≤20 kb	≤10 kb	++++	3 X Taq**	O	++	+++	X	O	O	1 min	O
EmeraldAmp® MAX HS PCR Master Mix	RR330A	≤20 kb	≤10 kb	++++	3 X Taq**	O	++++	+++	O	O	O	1 min	O
High-fidelity PCR													
PrimeSTAR® Max DNA Polymerase	R045A	≤15 kb	≤6 kb	+++	~1 error/45,177 bp #	O	++++	+++	O	O	X	5 -10 sec	X (Blunt)
PrimeSTAR® HS DNA Polymerase	R010A	≤22 kb	≤8.5 kb	+++	~12 errors/249,941 bp #	O	++++	+++	O	X	X	1 min	X (Blunt)
CloneAmp™ HiFi PCR Premix	639298	≤15 kb	≤6 kb	+++	~12 errors/542,580 bp #	O	++++	+++	O	O	X	5 sec	X (Blunt)
Long PCR & GC-rich PCR													
PrimeSTAR® GXL DNA Polymerase	R050A	≤40 kb	≤30 kb	+++	~1 error/16,230 bp #	O	++++	++++	O	X (Premix 版本 : R051A)	X	10 sec (w/ fast protocol)	X (Blunt)
TaKaRa LA Taq® DNA Polymerase	RR002A	≤48 kb	≤30 kb	+++	6.5 X Taq**	O	++	+	X (HS 版本 : RR042A)	X	X	1 min	O
TaKaRa LA Taq® DNA Polymerase w/GC Buffers	RR02AG	35 kb/48 kb §	20 kb/30 kb §	+++	6.5 X Taq**	O	++	++++	X	X	X	1 min	O
Advantage® GC 2 Polymerase Mix	639114	≤6 kb	≤3.5 kb	+++	3 X Taq**	O	++++	++++	O	X	X	1 min	O
Fast PCR													
SapphireAmp® Fast PCR Master Mix	RR350A	≤20 kb	≤10 kb	+++	3 X Taq**	O	++++	++	O	O	O	10 sec	O
SpeedSTAR™ HS DNA Polymerase	RR070A	≤30 kb	≤20 kb	+++	4.5 X Taq**	O	++++	+	O	X	X	10 sec	O
Direct PCR													
Terra™ PCR Direct Polymerase Mix	639270	-	≤2 kb	++	Not tested	X	++	++++	O	X	X	1 min	O

++++ Best

+++ Good

++ Average

+ Poor

* All of DNA Polymerases are provided with dNTPs except for Titanium Taq and Advantage 2

§ When used with GC Buffer I

** Fidelity determined by using the Kunkel method

Fidelity determined by direct sequencing