



POLYMERASES SELECTION GUIDE

Product	Hot Start	TA cloning	Blunt-end cloning	CG/AT rich regions	Methylated DNA amplification	5'-3' exonuclease activity	3'-5' exonuclease (proofreading) activity	Error rate	Increased stability at room temperature	MgCl ₂ (mM)	Separate buffer	All-in-one mix	Red/blue mix	Long PCR	Extension speed	Reverse transcription	
End-point PCR																	
EliZyme™ FAST Taq	-	✓	-	✓	✓	✓	-	1 per 2×10 ⁵	-	up to 4 weeks	3	✓, 5× or 10×	2×	2×	<6 kb	20 s/kb*	NA
EliZyme™ HS FAST	✓/Ab	✓	-	✓	✓	✓	-	1 per 2×10 ⁵	-	up to 4 weeks	3	✓, 5×	2×	2×	<6 kb	20 s/kb*	NA
EliZyme™ HS Robust	✓/Ab	✓	-	✓	-	-	-	1 per 5×10 ⁵	3× lower than Taq	up to 4 weeks	3	✓, 5×	2×	2×	<6 kb	15 s/kb**	NA
EliZyme™ HIFI	-	-	✓	✓	-	-	✓	1 per 1.5×10 ⁷	50× lower than Taq	up to 4 weeks	3	✓, 5×	-	-	<10 kb	30 s/kb	NA
EliZyme™ HS HIFI MIX	✓/Ab	-	✓	✓	-	-	✓	1 per 3.6×10 ⁶	100× lower than Taq	-	2,5	-	2×	-	<15 kb	15-30 s/kb	NA
EliZyme™ ProofRead	-	-	✓	✓	-	-	✓	1 per 2.5×10 ⁷	100× lower than Taq	-	3	✓, 5×	2×	2×	<17.5 kb	10-30 s/kb	NA
EliZyme™ ProofRead HS	✓/Aptamer	-	✓	✓	-	-	✓	1 per 2.5×10 ⁷	100× lower than Taq	-	3	✓, 5×	2×	2×	<17.5 kb	10-30 s/kb	NA
End-point RT-PCR																	
EliZyme™ OneS Kit	✓/Ab	✓	-	✓	-	✓	-	1 per 2×10 ⁵	-	-	3	-	2×	-	<6 kb	15 s/kb	45-55 °C/10-20 min
qPCR																	
EliZyme™ Green MIX	✓/Ab	-	-	✓	-	-	-	NA	-	-	3	-	2×	-	<200 b	NA	NA
EliZyme™ Green Blue MIX	✓/Ab	-	-	✓	-	-	-	NA	-	-	3	-	2×	✓	<200 b	NA	NA
EliZyme™ Probe MIX	✓/Ab	-	-	✓	-	✓	-	NA	-	-	3	-	2×	-	<200 b	NA	NA
EliZyme™ Probe Blue MIX	✓/Ab	-	-	✓	-	✓	-	NA	-	-	3	-	2×	✓	<200 b	NA	NA
EliZyme™ Super HRM MIX	✓/Ab	-	-	✓	✓	-	-	NA	-	-	3	-	2×	-	<200 b	NA	NA
EliZyme™ Super Probe MIX	✓/Ab	-	-	✓	-	✓	-	NA	-	-	3	-	4×	-	<200 b	NA	NA
qRT-PCR																	
EliZyme™ OneS Green Kit	✓/Ab	-	-	✓	-	-	-	NA	-	-	3	-	2×, RTase separated	-	<200 b	NA	45-55 °C/10 min
EliZyme™ OneS Probe Kit	✓/Ab	-	-	✓	-	✓	-	NA	-	-	3	-	2×, RTase separated	-	<200 b	NA	45-55 °C/10-20 min
EliZyme™ OneS Viral Probe Kit	✓/Ab	-	-	✓	-	✓	-	NA	-	-	3	-	4×, RTase separated	-	<200 b	NA	45-55 °C/5-20 min
EliZyme™ OneS Super Probe MIX	✓/Ab	-	-	✓	-	✓	-	NA	-	-	3	-	4×	-	<200 b	NA	52 °C/5-20 min

* For templates shorter than 1kb, 1 s extension can be used

** Amplicons longer than 5 kb require extension time 40 and 60 s per kb