

Enzyme Selection Guide

Product	KAPATaq™ Hotstart	KAPATaq™	KAPA2G™ Fast HotStart	KAPA2G™ Fast	KAPA2G™ Robust HotStart	KAPA2G™ Robust	KAPA Blood PCR Mix	KAPAHiFi™	KAPA LongRange™	KAPA SYBR® FAST
Performance										
Sensitivity	★★★	★★	★★★	★★	★★★★	★★★	★★	★★	★★★★★	★★★★★
Fidelity (vs wt Taq)	1x	1x	1x	1x	1x	1x	1x	15 - 25x	2 - 4x	N/A
Specificity	★★★★	★★	★★★★★	★★	★★★★★	★★	★★★	★★★★	★★★	★★★★★
Speed	60 sec/kb	60 sec/kb	1 - 15 sec/kb	1 - 15 sec/kb	30 - 60 sec/kb	30 - 60 sec/kb	60 sec/kb	30 sec/kb	60 sec/kb	20 - 30 sec annealing/extension
Robustness	★★★	★★	★★★	★★	★★★★★	★★★★★	★★★★	★★★★	★★★	★★★★★
Yield	★★★	★★	★★★	★★	★★★★★	★★★★★	★★★	★★★	★★★★★	★★★★★
Application										
Routine PCR	✓	✓	✓	✓	✓	✓			✓	
High-throughput PCR	✓		✓		✓		✓			✓
Multiplex PCR	✓		✓		✓					
Real-time/qPCR										✓
Whole blood PCR							✓			
Colony PCR					✓	✓				
Cloning								✓	✓	
GC-rich templates					✓	✓		✓		
Long templates								✓	✓	
Degraded/low quality template					✓	✓			✓	
Limited template					✓	✓			✓	
DNA labeling					✓	✓				
Crude sample					✓	✓	✓			
PCR inhibitor carryover					✓	✓				
Site-directed mutagenesis								✓		
Amplicon size from different templates										
Human genomic DNA	<3.5 kb	<3.5 kb	<3.5 kb	<3.5 kb	<3.5 kb	<3.5 kb	<3.5 kb	<8 kb	3.5 - 18 kb	0.1 - 0.5 kb
Plasmid or lambda DNA	<5 kb	<5 kb	<5 kb	<5 kb	<5 kb	<5 kb	N/A	<20 kb	5 - 30 kb	0.1 - 0.5 kb
cDNA	<3.5 kb	<3.5 kb	<3.5 kb	<3.5 kb	<3.5 kb	<3.5 kb	N/A	<8 kb	<10 kb	0.1 - 0.5 kb
Additional features										
3'-A product end	✓	✓	✓	✓	✓	✓	✓		✓	N/A
Blunt product end								✓		N/A
ReadyMix available	✓	✓	✓	✓			✓			✓