

Enzyme Selection Guide

Product	KAPA SYBR [®] FAST	KAPA PROBE FAST	KAPA2G Robust	KAPA2G Fast	KAPA HiFi	KAPA Long Range	KAPA Blood	KAPA Taq
Hot start available	✓	✓	✓	✓	✓	✓	N/A	✓
Performance								
Sensitivity	••••	••••	••••	•••	•••	••••	••	••
Fidelity (vs wt Taq)	1x	1x	1x	1x	100x	3x - 4x	1x	1x
Specificity	••••	••••	•••	•••	•••	••••	•••	••
Speed	20 - 30 sec combined annealing/extension	20 - 30 sec combined annealing/extension	15 - 30 sec/kb extension	1 - 15/kb sec extension	15 - 30 sec/kb extension	60 sec/kb extension	60 sec/kb extension	60 sec/kb extension
Robustness	••••	•••	••••	•••	••••	•••	•••	••
Yield	••••	••••	••••	•••	••••	••••	•••	••
Application								
Real-Time PCR	✓	✓						
Routine PCR			✓	✓				✓
High Fidelity PCR					✓	✓		
Fast PCR/qPCR	✓	✓	✓	✓	✓			
Cloning					✓	✓		
Colony PCR			✓		✓			
Crude sample PCR			✓				✓	
GC-Rich PCR			✓		✓			
Gene Expression	✓	✓						
Genotyping	✓	✓	✓	✓			✓	✓
Long Range PCR					✓	✓		
Multiplex PCR		✓		✓				✓
Next-Generation Sequencing	✓		✓	✓	✓	✓		
Whole Blood PCR							✓	
Single Protocol PCR			✓		✓			
Site-directed Mutagenesis					✓			
SNP Detection		✓						
Amplicon size from different templates								
Human genomic DNA	0.1 kb - 1.5 kb	0.1 kb - 0.5 kb	<3.5 kb	<3.5 kb	<15 kb	<20 kb	<3.5 kb	<3.5 kb
Plasmid or lambda DNA	0.1 kb - 1.5 kb	0.1 kb - 0.5 kb	<5 kb	<5 kb	<20 kb	<20 kb	N/A	<5 kb
cDNA	0.1 kb - 1.5 kb	0.1 kb - 0.5 kb	<3.5 kb	<3.5 kb	<15 kb	<10 kb	N/A	<3.5 kb
Additional features								
3'-A product end	N/A	N/A	✓	✓		✓	✓	✓
Blunt product end					✓			
ReadyMix available	✓	✓	✓	✓	✓		✓	✓