

PCR ENZYMES SELECTION GUIDE

	TAQ	FAST	FAST HOTSTART	HOTSTART	TAQKLE	AMPLIFI	AMPLIFI HOTSTART
HOTSTART	No	No	Yes	Yes	Yes	No	Yes
RANGE	5 kb	5 kb	5 kb	5 kb	16 kb	20 kb	20 kb
SPEED	2 kb / min	2-5 sec/ kb	2-5 sec/ kb	2 kb / min	2-6 kb / min	2-6 kb / min	2-6 kb / min
FIDELITY	-	-	-	-	-	100X vs Taq	100X vs Taq
SPECIFICITY	++	++	+++	+++	++++	+++	++++
SENSITIVITY	++	++	+++	+++	++++	++++	++++
TA CLONING	Yes	Yes	Yes	Yes	No	No	No
KIT	Yes *	Yes *	Yes *	Yes	No	Yes *	Yes *
MASTERMIX (WITHOUT DYE)	No	Yes	Yes	Yes	Yes	Yes	Yes
MASTERMIX (WITH DYE)	No	Yes	Yes	Yes	Yes	No	No
MAIN APPLICATIONS	Routine PCR	Fast Routine PCR	Fast PCR Multiplex Genotyping Direct PCR	Multiplex High Yield PCR	GC/AT Rich templates Samples containing inhibitors Long PCR	Site directed mutagenesis Long PCR NGS	Site directed mutagenesis Long PCR NGS Crude Sample PCR

* Kit with dNTPs included in the buffer

GRISP recommends following our protocol guidelines at all times.

Most of our enzymes are enhanced polymerases that will not work as well if not used with the recommended protocol.