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2x CesiumTaq PCR Kit

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For technical support or to place an order:

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Datasheet

2x CesiumTaq PCR Kit

Amount: 1.25ml (50 reactions) per tube

Shipping conditions: Ice pack

Storage conditions: for best performance, store at -20°C

Life: At least 1 year if stored at -20°C and 10 freeze/thaws or at least 3 months if stored at 4°C.

PRODUCT DESCRIPTION

Our 2x ready-to-use PCR kit contains CesiumTaq, a double cold-sensitive mutant of Taq polymerase. Due to its suppressed activity at low temperatures this enzyme is designed for hot start PCR performance. This kit can be used for regular, as well as real time PCR. It contains everything necessary for a PCR reaction to work perfectly, just add your template, primers/probes and water. For real time reactions you may need to add a fluorescent dye as an alternative to probes.

A TYPICAL PCR PROTOCOL for a 50µl reaction

Reagent	Volume	Final Concentration
2x CesiumTaq PCR Kit	25µl	1x
Left Primer	variable	0.2 µM
Right Primer	variable	0.2 µM
DNA template [†]	Variable	0.5-100ng
Betaine 5M [‡]	13µl (optional)	1.3 M
de-ionized distilled H ₂ O	Adjust final volume to 50µl	-

[†] DNA amount depends mostly on genome size and target gene copy number.

[‡] Betaine is a general PCR enhancer. It usually improves the yield and specificity of amplification especially for longer targets.

^{*} The present PCR kit is optimized for up to 1kb targets. We offer LA PCR kits, optimized for longer targets.

CYCLING CONDITIONS

1. Pre-incubation: 94° for 2 minutes for 1 cycle
2. De-naturation: 94° for 40-60 seconds
3. Annealing: 55°-70° depending on the specific primers (5° less than T_m) for 40-60 seconds
4. Extension: 68° for 2 min / 1kb target
5. Repeat steps 2-4 for 25-40 cycles

REFERENCES

Kermekchiev, M.B., et al. (2003) Cold-sensitive mutants of Taq DNA polymerase provide a hot start for PCR. Nucl Acids Res. 31, 6139-6147.

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