COSMO BIO CO., LTD.
Inspiration for Life Science

Bio Academia

Taq Blend with Pfu (+ dNTPs)

02-120 200 U , 02-120-5 5 x 200 U

Taq Blend with Pfu is optimized blend of Taq and Pfu DNA polymerases. The proof-reading 3'→5' exonuclease activity of Pfu increases the fidelity and robust amplification of Taq DNA polymerase. The reaction buffer has been formulated for robust yields and long PCR.

General composition of PCR reaction mixture (total 50µl)	
Taq Blend with *Pfu* (5 unit/µl)	* 0.25 µl
5x Buffer (Taq Blend with *Pfu*)	10µl
2.5mM (each) dNTPs	4 µl
Template	<500 ng
Primer 1	0.2～1.0 µM (final conc.)
Primer 2	0.2～1.0 µM (final conc.)
Sterile distilled water	up to 50 µl

*Use of excess amount is not recommended

Storage conditions: Store at -20℃

Concentration: 5 units/ul,

Purity: Greater than 95% purity as determined by SDS-PAGE (CBB staining) .
The absence of endonucleases 3→5amplification was attained with λ DNA template was confirmed.

PCR Test: Good amplification result was obtained in PCR reaction using λ phage DNA as a template (Fig.2).

Quality assurance : Amplification was obtained in PCR reaction.

Reagents Supplied with Enzyme:
1) 5 x Reaction buffer for Taq Blend with Pfu
2) dNTPs (2.5 mM each)

Experimental Exampe

Robustness of Taq Blend with Taq as compared Taq Economy.

PCR conditions

94℃ 1 min → 98℃ 5 sec / 68℃ 4-20 min (30 cycles)

(extention time at 68℃)
2-8kbp:4min 10-14kbp:7min 16-18kbp:10min 20-35kbp:20min

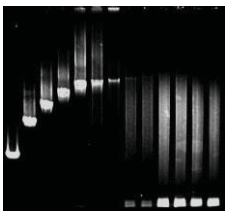

Fig.1

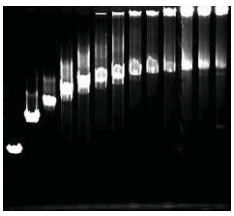

Fig.2

Result
Taq Blend with Pfu could amplify up to 35 kb template while Taq could amplify up to14kb.

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