

U DNA / 72 30 min

10 nmol

Taq DNA 94 KD 10 kb 30s/kb 70~75

10s/kb 5' 3' 3' 5'

3'-dA TA

		500U	500U	1,000U	1,000U	12,000U
Taq DNA	5U/εl [1]	100 εl	100 εl	200 εl	200 εl	100 εl 1 24
Taq DNA	2.5U/εl	200 εl	200 εl	400 εl	400 εl	200 εl 1 24
[1]						
10 1 Taq Buffer Mg ²⁺ Plus	[2]	1.25 ml	1.25 ml	1.25 ml 1 2	1.25 ml 1 2	1.25 ml 1 24
10 1 Tpol Buffer Mg ²⁺ Plus	[2]	1.25 ml	1.25 ml	1.25 ml 1 2	1.25 ml 1 2	1.25 ml 1 24
6 1 Loading Buffer ^[3]		1 ml	1 ml	1 ml	1 ml	-
dNTPs 2.5mM [4]		-	1 ml	-	1 ml 1 2	-

[1] 5U/εl 2.5U/εl

5U/εl

[2] 10 1 Taq Buffer 10 1 Tpol Buffer Mg²⁺ Plus Mg²⁺ Free

Mg²⁺ Plus Mg²⁺ Free Taq Buffer Tpol Buffer 25mM MgCl₂ Taq Buffer PCR

Buffer Tpol Buffer PCR

[3] P1015 6 1 Loading Buffer Cat. # M9041

[4] dNTPs dATP dGTP dCTP dTTP P1011/P1013/P1015 dNTPs

Cat. # P9011/P9012/P9013

PCR DNA

		(50 εl reaction volume)	(50 εl reaction volume)
1	10 1 Taq Buffer Mg ²⁺ Plus [1]	5 εl	1 1
2	dNTPs 2.5mM	4 εl	0.4 mM
3	upstream primer (10 εM) ^[2]	2 εl	0.4 εM
4	downstream primer (10 εM) ^[2]	2 εl	0.4 εM
5	Taq DNA 5U/εl [3]	0.5 εl	2.5U
6	template DNA ^[4]	1-4 εl	<1εg
7	[5]	To 50 εl	-
optional	MgCl ₂ (MgSO ₄)/PCR Enhancer ^[6]	Variable	-

[1] Taq Buffer PCR Buffer Tpol Buffer

[2] 0.1-1 εM

[3] DNA

[4]	DNA	50 ɛl	3	1Ŧ10 ⁻⁵	Taq DNA
Template	Dosage				
DNA	0.1ɛg-1ɛg				
ǻDNA	0.5ng-5ng				
DNA	10ng-100ng				
DNA	0.1ng-10ng				
[5]	Cat. #	P9021/P9022/P9023			
[6]	25mM MgCl ₂	Cat. #	P9031	PCR Enhancer	Cat. #
					P9041

Initial Denaturation	94	3 min	1
Denaturation	94	30 sec	25-35
Annealing	55-68 ^[1]	30 sec	
Extension	72	Variable ^[2]	
Final Extension	72	5-10 min	1

[1] Tm

[2] 30s/kb 10s/kb

loading buffer

	1	2		
DNA		1: 10000	3	
DNA	4	PCR	PCR Enhancer	Cat. #
				P9041
Cat. #	P9031		MgCl ₂	

1	Taq DNA			
	Taq DNA	DNA		
2	Taq DNA	PCR	3'	1
	TA	Taq DNA		A