ExpressGO™ PreMix-CE 2X PCR Master Mix

Operation Manual

Cat.: C108100-CE
Size: 1.25 mL (for 100 PCR reactions)
Store at -20°C upon arrival
Research Use Only

I. Description:

2X ExpressGO™ PreMix-CE is an optimized and ready-to-use mixture containing reaction buffer, dNTPs, glycerol, PCR enhancers and the PCR polymerase as a 2-fold concentration. Compared with conventional Taq polymerase, ExpressGO™ Taq exhibits higher fidelity and less nonspecific polymerase activity at temperatures lower than 50°C. Using 2X ExpressGO™ PreMix-CE, "hot start PCR" can be achieved without additional reagents or procedures. Thus, 2X ExpressGO™ PreMix-CE can easily amplify 5 kb DNA fragments from lambda DNA template with high specificity. In addition, 2X ExpressGOTM PreMix-CE is supplied with a specially optimized buffer that enables robust fluorescence signals for downstream capillary gel electrophoresis technology. It is suitable for routine PCR applications with variant samples, such as purified DNA, cDNA, and bacterial colonies.

II. Applications:

1. Suitable for amplifying up to 10 kb DNA fragments
2. High throughput PCR
3. Generation of PCR products for TA cloning

III. Storage Condition

-20℃	4℃	25℃	37℃
2 years	2 months	21 days	14 days

IV. Recommended PCR Condition:

DNA	Amount
Genomic DNA	10-200 ng
Plasmid DNA	1-10 ng
cDNA	~100 ng

Component	Volume per reaction (μL)
1-100ng DNA template	Variable
10 μM forward Primer	0.5
10 μM reverse Primer	0.5
2X ExpressGO™ PreMix-CE	12.5
Nuclease-Free Water	to 25
Total volume	25μL

V. Thermocycling Conditions for a Routine PCR:

The recommended parameters may be optimized for each new primer-template pair for optimal specificity and amplification.

Cycles	Step	Temp.	Time
1	Initial denaturation	95℃	1-5 mins
25-35	Denaturation	95℃	30 sec
	Annealing	45-72℃	30 sec
	Extension	68/72℃	1 min/kb
1	Final Extension	72℃	5-10 mins
	Hold	14℃	--

VI. Experimental Data

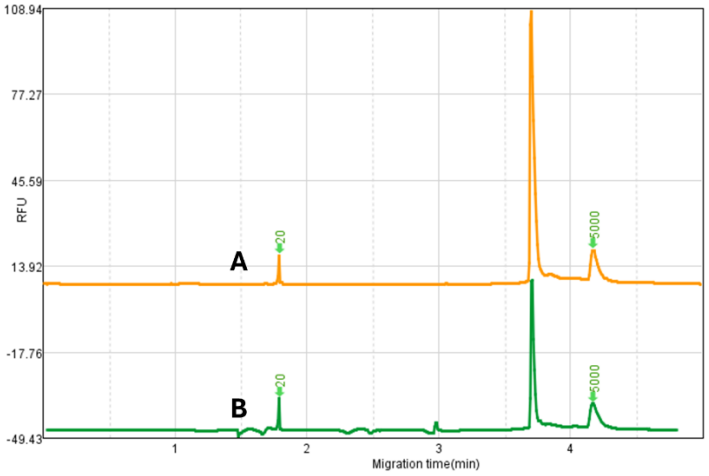

Figure 1. Comparison of the PCR amplification between ExpressGO™ PreMix-CE and ExpressGO™ PreMix after capillary electrophoresis analysis.
Line A was ExpressGO™ PreMix-CE, and line B was ExpressGO™ PreMix. Template: 5ng pET3a plasmid; Target: 1kb; Cartridge: S1 (BiOptic); Sample injection: 4kv, 10sec; Sample separation: 6kv, 300sec; Alignment marker: 20bp-5kb (BiOptic).

Address: (23141) 4F, No.108-3,
Minquan Rd., Hsin-Tien District,
New Taipei City, Taiwan (R.O.C)

TEL: +886-2-2218-8726
FAX: +886-2-2218-8727
E-Mail: service@bioptic.com.tw