

ExpressGO™ PreMix-CE 2X PCR Master Mix

Catalog number: C108100-CE
Size: 1.25 mL (for 100 PCR reactions)
Store at -20°C
For Research Use Only.

I. Description:

2X ExpressGO™ PreMix-CE is an optimized and ready-to-use mixture contains of reaction buffer, dNTPs, PCR enhancers and the PCR polymerase as 2-fold concentration. Comparing with conventional Taq polymerase, ExpressGO™ Taq exhibits higher fidelity and less nonspecific polymerase activity at temperature lower than 50°C. By using 2X ExpressGO™ PreMix-CE, “hot start PCR” can be achieved without any additional reagents or procedures. Thus, 2X ExpressGO™ PreMix-CE can easily amplify 5 kb DNA fragment from lambda DNA template with high specificity. In addition, 2X ExpressGO™ PreMix-CE are supplied with specially optimized buffer that enable robust fluorescence signal for downstream capillary gel electrophoresis technology. It is suitable to routine PCR applications with variant samples, such as purified DNA, cDNA, or even bacterial colonies.

II. Applications:

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

III. Storage Condition

-20°C	4°C	25°C	37°C
1.5 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	Amount per reaction
1-100 ng DNA template	Variable
10 µM forward Primer	0.5 µl
10 µM reverse Primer	0.5 µl
2X ExpressGO™ PreMix-CE	12.5 µl
Nuclease-free water	to 25 µl
Total volume	25 µl

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	Temperature	Time
1	Initial denaturation	95°C	1-5 mins
25-35	Denaturation	95°C	30 s
	Annealing	45-72°C	30 s
	Extension	68/72°C	1 kb/min
1	Final Extension	72°C	5-10 mins
	Hold	14°C	--

VI. Experimental Data

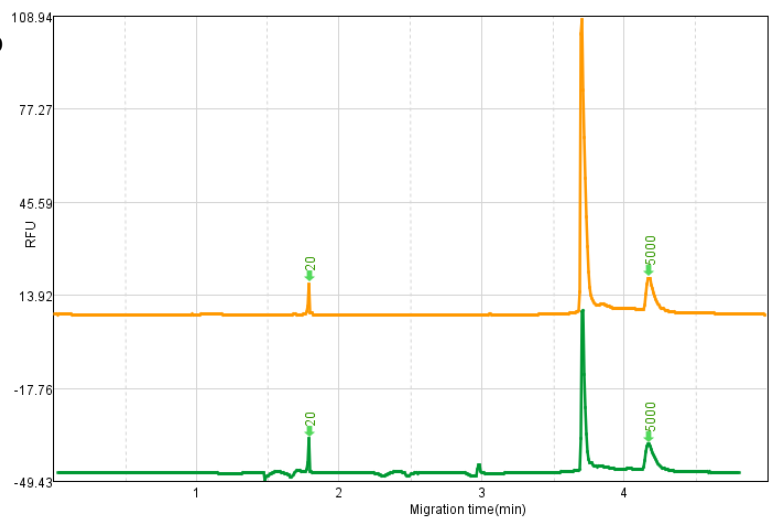


Figure 1. Comparison of PCR amplification between ExpressGO™ PreMix-CE (yellow line) and ExpressGO™ PreMix (green line) after capillary electrophoresis analysis. Template: pET3a plasmid (5ng), Target: 1Kb, Cartridge: S1 (BiOptic). Sample injection: 4 kV, 10s. Sample separation: 6 kV, 300s. Alignment marker: 20bp-5K (BiOptic).