

Taq master mixes

EconoTaq PLUS and PLUS GREEN 2X Master Mixes

More effective than other Taq master mixes. EconoTaq™ 2x Master Mixes contain a proprietary PCR enhancer, enabling successful amplifications of targets that fail with other Taq Master Mixes (Figure 2A).

Excellent results in routine PCR. EconoTaq PLUS GREEN and EconoTaq PLUS contain high purity, high activity EconoTaq DNA Polymerase for reliable amplification of templates up to 5 kb (Figure 2). For fluorescence or absorbance detection

assays, EconoTaq PLUS 2X Master Mix is available without the dyes.

Great value! EconoTaq PLUS GREEN and EconoTaq PLUS offer great value when compared to Taq master mixes from other suppliers.

Convenient. EconoTaq 2X Master Mixes are packaged in 50 reaction vials, stable for 10 freeze-thaw cycles, and can be stored in the refrigerator (+4 °C) for up to 3 months.

- Outstanding performance and value makes them perfect for routine PCR.
- 2X Master Mix contains a proprietary enhancer, dNTPs, and optimal magnesium concentration. High density buffer allows direct gel loading.
- EconoTaq PLUS GREEN includes inert gel loading and tracking dyes (Figure 1).

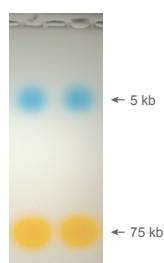


Figure 1. Easy visualisation with EconoTaq PLUS GREEN. The green loading color separates into a slow-moving blue dye and a fast-moving yellow dye.

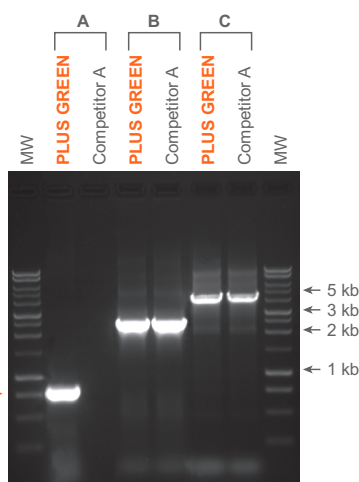


Figure 2. EconoTaq PLUS GREEN Master Mix amplified a template GoTaq Green Master Mix (Competitor A) could not (arrow). PCR was performed according to the manufacturer's recommendations. Panel A, a prokaryotic single-stranded DNA binding protein (genomic DNA); Panel B, prokaryotic DNA polymerase A (genomic DNA); Panel C, 4.5 kb gene (plasmid DNA).

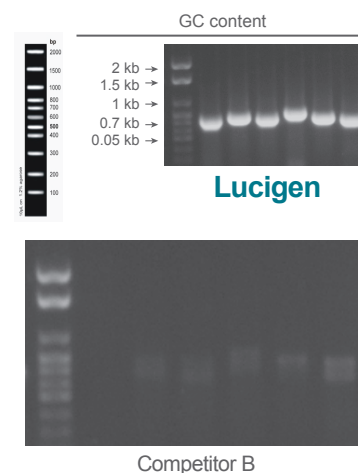


Figure 3. GC-rich regions from human genomic DNA were PCR amplified using 98 °C denaturation.

Ordering information

Cat no.	Size	Description
30033-1	500 rxns	EconoTaq PLUS GREEN 2X Master Mix (50 rxns per tube)
30033-2	1,000 rxns	
30035-1	500 rxns	EconoTaq PLUS 2X Master Mix (50 rxns per tube)
30035-2	1,000 rxns	

Master Mix specification

Components	0.1 unit/μL of Taq DNA polymerase, Reaction Buffer (pH 9.0), 400 μM dATP, 400 μM dGTP, 400 μM dCTP, 400 μM dTTP, 3 mM MgCl ₂ , a proprietary PCR enhancer/stabiliser, with or without blue and yellow tracking dyes. Use EconoTaq PLUS GREEN 2X Master Mix when the PCR products will be analysed by agarose gel electrophoresis. Use EconoTaq PLUS 2X Master Mix when dyes may interfere with analysis.
Samples available	Ask your local distributor.

EconoTaq DNA polymerase

Economical choice for PCR

High activity. EconoTaq DNA Polymerase has high PCR activity and low background (Figure 1).

High purity. The enzyme is free of detectable DNA, as well as endonuclease and nicking activities. It is purified to apparent homogeneity.

Reliable results. Optimised magnesium concentration in 10X Reaction Buffer provides excellent results when compared to competitors' Taq polymerases (Figure 1).

Flexibility. Provided with your choice of: 10X Reaction Buffer with Mg⁺⁺; or 10X Reaction Buffer without Mg⁺⁺ and a separate tube of 25 mM MgCl₂.

Low price. Compare EconoTaq DNA Polymerase to Taq DNA polymerase from other suppliers and see how much money your lab can save.

Ordering information

Cat no.	Size	Description
30031-1	1,000 U	EconoTaq DNA Polymerase (with Mg ⁺⁺)
30031-2	5,000 U	
30031-3	10,000 U	
30035-1	500 rxns	EconoTaq PLUS 2X Master Mix (50 rxns per tube)
30035-2	1,000 rxns	
30030-1	2 ml (2 x 1 mL)	2.5 mM dNTP Mix, PCR Grade
30030-2	10 ml (5 x 2 mL)	
30030-3	20 ml (10 x 2 mL)	
30029-1	750 µl of each dNTP	10 mM dNTP Set, PCR Grade
30029-2	5 x Cat. No. 89137-892	

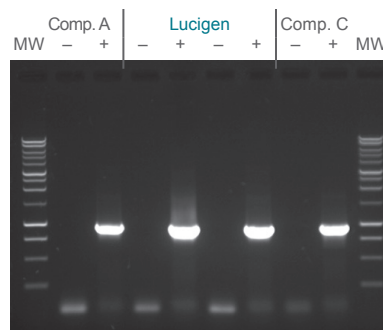


Figure 1. Taq DNA polymerase from Competitor A and Competitor C were compared to two lots of Lucigen's EconoTaq DNA Polymerase in amplifying the ampicillin gene (0.8 kb) in a pUC19 vector. (-), no DNA. (+), DNA added. (40 ng).

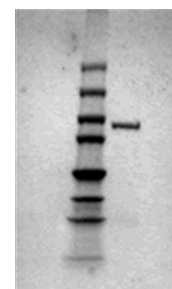


Figure 2. High purity of EconoTaq DNA Polymerase (SDS PAGE). Lane 1, broad range molecular weight markers; Lane 2, Lucigen EconoTaq DNA Polymerase.

Specifications

Activity determination	One unit catalyses the incorporation of 10 nmol of dNTP into acid-insoluble material in 30 minutes at 70 °C in 50 mM Tris-HCl (pH 9.0), 50 mM NaCl, 5 mM MgCl ₂ , 200 mM dGTP, dATP, dTTP dCTP (a mix of unlabeled and [33P] dCTP), 10 mg of Activated Calf Thymus DNA, and 0.1 mg/mL BSA.
Purity	Free of contaminating DNA, endonuclease, and nicking activities. Greater than 99% pure by SDS-PAGE.
Storage buffer	10 mM Tris-HCl (pH 7.5), 100 mM KCl, 0.1% Triton X-100, 0.1 mM EDTA, 1 mM DTT, and 50% glycerol.
10X reaction buffer	100 mM Tris-HCl (pH 9.0), 500 mM KCl, 1% Triton X-100; with or without 15 mM MgCl ₂ .
Samples available	Ask your local distributor.
Note	EconoTaq DNA Polymerase is provided at 5 units/µL with a choice of: 10X Reaction Buffer with Mg ⁺⁺ ("with Mg ⁺⁺ "); or 10X Reaction Buffer without Mg ⁺⁺ and a separate tube of 25 mM MgCl ₂ ("separate Mg ⁺⁺ ").

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Also available:

PCR Grade dNTPs

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