Ampliqon

Taq DNA Polymerase Master Mix

2.0 Master Mix Kit (1.5mM $MgCl_2$)

Cat. No.	Size Reactions	Taq DNA Polymerase Master Mixes	$MgCl_2$ Conc.
AMP120301	100	1.1x Master Mix	1.5 mM
AMP120303	500	1.1x Master Mix	1.5 mM
AMP120306	2,500	1.1x Master Mix	1.5 mM
AMP130301	100	1.1x Master Mix	2.0 mM
AMP130303	500	1.1x Master Mix	2.0 mM
AMP130306	2,500	1.1x Master Mix	2.0 mM
AMP140301	100	2.0x Master Mix	1.5 mM
AMP140303	500	2.0x Master Mix	1.5 mM
AMP140306	2,500	2.0x Master Mix	1.5 mM
AMP150301	100	2.0x Master Mix	2.0 mM
AMP150303	500	2.0x Master Mix	2.0 mM
AMP150306	2,500	2.0x Master Mix	2.0 mM

Store at -20°C. FOR RESEARCH USE ON

General Description

Taq DNA Polymerase Master Mix is a ready-to-use 2.0X reaction mix. Simply add primers, template, and water to successfully carry out primer extensions and other molecular biology applications.

Ampliqon Taq DNA Polymerase, the NH_4^+ buffer system, dNTPs and magnesium chloride are present in Taq DNA Polymerase Master Mix. Each reaction requires 25µL of the 2.0X reaction mix. Simply add primers, template and water to a total reaction volume of 50 µL.

Taq DNA Polymerase Master Mix offers several advantages. Set up time is significantly reduced. The chance of contamination component stocks is eliminated. Reduction of reagent handling steps leads to better reproducibility. Standard tests can be set up with the confidence that results will be consistent every time.

Conposition of 2.0X Taq Master Mix

- 150 mM Tris-HCl ph 8.5, 40 mM $(NH_4)_2SO_4$, 3.0 or 4.0 mM $MgCl_2$*, 0.2% Tween 20®
- 0.4 mM dNTPs
- 0.05 units/µL Ampliqon Taq polymerase
- Stabilizer

*Taq DNA Polymerase Master Mixes are offered in two final $MgCl_2$ concentrations: 1.5mM and 2.0mM.

Suggested Protocol using Taq Master Mix

This protocol serves as a guideline for primer extensions. Optimal reaction conditions such as incubation times, temperatures, and amount of template DNA may vary and must be individually determined.

Notes:

- Set up reaction mixtures in an area separate from that used for DNA preparation or product analysis.
- The table below shows the reaction set up for a final volume of 50 µL. If desired, the reaction size may be scaled down. Use 10 µL of the 2.0X master mix in a final volume of 20 µL.
- **Important :** Spin Taq Master Mix vials briefly before use.

1. Set up each reaction as follows:

Component	Vol. / reaction	Final
Taq Master Mix	25 µL	1X
Primer A	Variable	0.1 - 1.0 µM
Primer B	Variable	0.1 - 1.0 µM
Distilled Water	Variable	- - - -
Template DNA	Variable	Variable
TOTAL	50 µL	- - - -

2. Mix gently by pipetting the solution up and down a few times.

3. Program the thermal cycler according to the manufacturer's instructions.

   For maximum yield and specificity, temperatures and cycling times should be optimized for each new template target or primer pair.

4. Place the tubes in the thermal cycler and start the reaction.