Ampliqon

Taq DNA Polymerase Master Mix RED

2.0 Master Mix Kit (1.5mM $MgCl_2$)

Cat. No.: 180301 (100 Reactions)

Cat. No.	Size Reactions	Taq DNA Polymerase Master Mixes RED	$MgCl_2$ Conc.
160301	100	1.1x Master Mix RED	1.5 mM
160303	500	1.1x Master Mix RED	1.5 mM
160306	2.500	1.1x Master Mix RED	1.5 mM
170301	100	1.1x Master Mix RED	2.0 mM
170303	500	1.1x Master Mix RED	2.0 mM
170306	2.500	1.1x Master Mix RED	2.0 mM
180301	100	2.0x Master Mix RED	1.5 mM
180303	500	2.0x Master Mix RED	1.5 mM
180306	2.500	2.0x Master Mix RED	1.5 mM
190301	100	2.0x Master Mix RED	2.0 mM
190303	500	2.0x Master Mix RED	2.0 mM
190306	2.500	2.0x Master Mix RED	2.0 mM

Store at -20°C. *Reagent for in-vitro laboratory use only*

General Description

Taq DNA Polymerase Master Mix RED 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* polymerase, the NH_4^+ buffer system, dNTPs and magnesium chloride are conveniently present in the Taq DNA Polymerase Master Mix RED. An inert red dye and a stabilizer are also present to allow direct loading of the final products onto a gel for analysis.

Taq DNA Polymerase Master Mix RED offers several advantages. Set up time is significantly reduced. There is no need to buy and use separate loading dyes to load reaction products onto agarose gels for electrophoresis and subsequent visualization. The chance of contaminating 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.

Composition of 2x Taq Master Mix RED

- 150 mM Tris-HCl pH 8.5, 40 mM $(NH_4)_2S0_4$, 3.0 or 4.0 mM $MgCl_2$*, 0.2% Tween 20®
- 0.4 mM dNTPs
- 0.05 units/µL Ampliqon *Taq* DNA polymerase
- Inert red dye and a stabilizer

*Taq DNA Polymerase Master Mix RED is offered in two final $MgCl_2$ concentrations: 1.5mM and 2.0mM.

Suggested Protocol using Taq Master Mix RED

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.
- After primer extension, a sample (10 to 30% of the reaction) can be loaded directly on a gel for analysis.
- **Important:** Spin Taq Master Mix RED vials briefly before use.

1. Set up each reaction as follows:

Component	Vol./reaction	Final Conc.
Taq Master Mix RED	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 volume	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.

Related Products

Description	Cat. No.
Taq DNA Polymerase (500 Units) *with 10X Ammonium Reaction Buffer* *with 10X Standard Reaction Buffer*	**110303**
Taq DNA Polymerase (500 Units) *with 10X Combination Buffer*	**110403**
Taq DNA Polymerase (500 Units) *with 10X Mg^{++} Free Ammonium Buffer*	**110503**
Taq DNA Polymerase 2.0X Master Mix (100 Reac) *with 2.0 mM MgCl2*	**150301**
Taq DNA Polymerase 2,0X MaMi RED (100 Reac) *with 1.5 mM MgCl2,*	**180301**
Taq DNA Polymerase 2.0X MaMi RED (100 Reac) *with 2.0 mM MgCl2*	**190301**
AccuPOL DNA Polymerase (500 Units)	**210303**
TEMPase Hot Start DNA Polymerase (500Units) *with 10X TEMPase Buffer I* *with 10X TEMPase Buffer II*	**220303**
UniPOL –Long Range PCR (100 Reac)	**270701**
Rapid Ligation Kit (50 React)	**750300**
RT-PCR One Tube (100 Reac)	**740301**
TEMPase Hot Start 2X Master Mix *with TEMPase Buffer I* (100 Reac)	**230301**
TEMPase Hot Start 2X Master Mix *with TEMPase Buffer II* (100 Reac)	**230701**
dNTP Mix (2 x 500µl) (12.5 mM of each dA, dC, dG and dT)	**501004**
dNTP Mix, (2 x 500 µl) (10 mM of each dA, dC, dG and dT),	**502004**
GC5 Value Efficiency, 10^8 Cfu/µg pUC19 Chemically Competent Cells, (10x 200µl)	**812010**
GC5 High Efficiency, 10^9 Cfu/µg pUC19 Chemically Competent Cells, (10x 50µl)	**805010**
GC5 High Efficiency, 10^9 Cfu/µg pUC19 Chemically Competent Cells, (5x 200µl)	**802005**
SuperPath GC10, 10^{10} Cfu/µg pUC19 ElectroCompetent Cells, (5x 80µl)	**830805**
SOC Medium, 10x 10mL	**800000**

NOTICE
In certain countries, patents cover the PCR process. This product is intended for researchers having a license to perform PCR or those not required to obtain a license.