



73 Ridgeway Road  
Candler, NC 28715  
800.767.0665  
[Sales@PhenixResearch.com](mailto:Sales@PhenixResearch.com)  
[www.PhenixResearch.com](http://www.PhenixResearch.com)

## **Taq Mastermix Red**

### **Catalogue Numbers:**

DNP-105R 100 Reactions  
DNP-205R 500 Reactions

### **Features**

- Convenient pre-mixed, pre-optimized 2x solution
- Reduced risk of contamination
- Dramatically decreases the time required for reaction set-up
- Reproducible results
- Direct gel loading

### **Applications**

- Routine PCR applications
- Products suitable for TA cloning
- High throughput

### **Description**

Mastermix Red is a complete ready-to-use 2x reaction mix containing an ultra-stable *Taq* DNA polymerase. It contains an additional inert red dye that permits easy visualization and direct loading onto a gel. There is no need to add loading buffer as the mix is of sufficiently high density to sink to the bottom of the gel.

Mastermix Red has been developed to perform PCR assays of many common genomic and cDNA templates; the user has simply to add water, template and primers. It dramatically reduces the time required to set up reactions, thereby minimizing the risk of contamination. Greater reproducibility is ensured, by reducing the number of pipetting steps that can lead to errors.

Mastermix Red has been optimized for a wide variety of templates, however an additional 50mM of MgCl<sub>2</sub> solution is included should any fine adjustments be required.

### **Mastermix Red Protocol**

#### **Reaction Conditions (For a 50µl reaction)**

Mastermix Red	25µl
Template and Primers	as required
Water (ddH <sub>2</sub> O)	up to 50µl

Denature: 94-96°C

Elongate: 70-72°C (allowing 15-30 seconds/kb)

For optimal resolution of PCR products, we recommend the use of Tris-Acetate EDTA (TAE) buffer for gel preparation and electrophoresis.

An additional tube of 50mM MgCl<sub>2</sub> is provided should any fine adjustments be necessary. The table below shows the volume of MgCl<sub>2</sub> that must be added to a 50µl final reaction volume to achieve the desired final concentration.

Final MgCl <sub>2</sub> Required	MgCl <sub>2</sub> to be added
2.0mM	0µl
2.5mM	0.5µl
3.0mM	1µl

**This data is intended for use as a guide only; conditions will vary from reaction to reaction and may need optimization.**

## Product Specifications

### Batch details:

Batch No: See vial  
Cat No: See vial

### Components

<b>Mastermix Red</b>	<b>100 Reactions</b>	<b>500 Reactions</b>
Mastermix Red	2 x 1.25ml	10 x 1.25ml
50mM MgCl <sub>2</sub> Solution	1.2ml	1.2ml

### Reagent Specifications:

MgCl<sub>2</sub> Stock Solution: 50mM MgCl<sub>2</sub>

### Storage Conditions:

Mastermix Red can be stored for up to 6 months at -20°C, or up to 2 weeks at +4°C. Repeated freeze/thaw cycles should be avoided.

### Shipping Conditions:

On Dry Ice or Blue Ice