

# TAQ DNA POLYMERASE MASTER MIX RED



#### Introduction

Taq DNA Polymerase Master Mix RED is a convenient, ready-touse 2x master mix that simplifies PCR setup and gel analysis, making it ideal for high-throughput and routine applications. Formulated with Ampliqon's robust Taq DNA Polymerase, it includes an inert red tracking dye and stabilizer, allowing direct loading onto agarose gels without the need for a separate loading buffer. This feature eliminates time-consuming sample preparation before electrophoresis.

The red dye migrates at approximately 300-1000 bp on a 0.5-1.5% agarose gel and does not interfere with PCR performance, ensuring reliable and consistent results. When needed, the dye can be easily removed through spin column purification, making the master mix suitable for sequencing and other downstream applications.

Taq DNA Polymerase Master Mix RED is optimized for standard PCR assays that do not require fluorescence-based detection, offering an efficient solution for rapid PCR setup and streamlined gel electrophoresis. This versatile master mix is an essential tool for laboratories focused on routine DNA amplification.

#### Features

- Ready-to-use PCR master mix
- Direct loading onto agarose gel
- Red dye for visualization of pipetting, mixing, and loading
- Timesaving due to fewer handling steps

#### User-friendly applications

Ampliqon has developed two user-friendly applications utilizing Taq DNA Polymerase Master Mix RED:

- Genotyping with Taq DNA Polymerase 2x Master Mix RED (figure 1)
- Sanger sequencing (figure 2)



**Direct gel loading.** After amplification PCR products can be loaded directly onto agarose and SDS DNA gels. The red dye ensures easy visualization of both pipetting and gel loading. The red dye front migrates at 300-1000 bp on 0.5-1.5 % agarose gels.

#### **Best-selling product**

Taq DNA Polymerase Master Mix RED is undoubtedly the most preferred PCR solution. The popularity of Taq DNA Polymerase Master Mix RED is due to the user-friendly experience and the convincing and reliable PCR results obtained. The master mix is suitable for all standard PCR applications.



**Figure 1. Genotyping with Taq DNA Polymerase 2x Master Mix RED.** The illustration highlights a fast workflow for genotyping using Taq DNA Polymerase 2x Master Mix RED. DNA is extracted in just 8 minutes (6 min at 65 °C + 2 min at 98 °C) with Q-Extract DNA Extraction Solution (A560001). The PCR-ready DNA is then amplified with Taq DNA Polymerase 2x Master Mix RED, ensuring robust and reliable results.



#### Figure 2. Sanger sequencing.

Despite the red dye in Taq DNA Polymerase Master Mix RED, the resulting amplicons can easily be used for Sanger sequencing.

Simply add PureIT ExoZAP PCR CleanUp (A620601) to the tube containing your PCR product and incubate at 37 °C (enzymatic treatment) for 2 minutes followed by heat inactivation at 80 °C for 3 minutes. Before Sanger sequencing, perform an 8-fold dilution of the treated PCR product to reduce the concentration of the red dye.

Ordering information	RXN	Cat #
Taq DNA Polymerase Master Mix RED $2x$ and 1.5 mM MgCl <sub>2</sub>	100 500 2500 5000	A180301 A180303 A180306 A180307
Taq DNA Polymerase Master Mix RED 2x and 2 mM MgCl <sub>2</sub>	100 500 2500 5000	A190301 A190303 A190306 A190307

### Applications

- Standard testing and routine PCR
- Screening
- High-throughput testing

## PCR ENZYMES MADE IN DENMARK

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