



High Performance Lysis Buffer

DESCRIPTION

The **primaDIRECT** PCR system combines sample lysis with direct PCR for fast and reliable genotyping and other standard PCR applications. **Samples of various origin** (tissue, cells, mouse tails, plant pieces) are lysed within 15 minutes using our proprietary RTL buffer - **without the need of** column- or magnetic-based **extraction procedures**.

The 2x PCR Master Mix is not included, please see SL-9614 for the PCR Master Mix.



SAMPLE LYSIS & PCR WORKFLOW

i) BEFORE YOU START

Do not vortex to prevent damage to the included enzymes.

STEP 1: SAMPLE LYSIS

- 1. Fill 50 100 mg of your sample in to a 1.5 mL reaction tube
 - 1. If using cells, fill 10³ 10⁶ cells in to a tube, spin it down at max speed and remove the supernatant medium
- 2. Add 50-200 µL primaDIRECT RTL buffer
- 3. Incubate at 56°C for 10-60 minutes
- 4. Incubate at 95 °C for 3-10 minutes to stop the enzymatic reactions
- 5. **Optional:** Spin down your sample and transfer the supernatant to a fresh 1.5 mL tube recommended for long-term storage
- 6. Place your sample on ice while preparing the PCR reaction
- 7. Add 1-2 μ L of your lysed sample to the PCR reaction mix.

i) LYSIS OF SAMPLE MATERIAL

The lysis will not visually degrade the sample - which is absolutely fine and does not have any influence on the PCR.

You can lyse various types of sample material such as cells, animal tissue, plant leaves, mouse ears or mouse tails.

In general, use as little sample material for lysis as possible to reduce the amount of PCR inhibitors present in the reaction mixture.



STEP 2: PIPETTE PCR REACTION MIXTURE

(i) NOTE

The **primaDIRECT** lysis buffer system is compatible with various robust PCR Master Mixes such as the KAPA 2G ROBUST Readymix.

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As an option, **primaDIRECT can be obtained as a kit supplied with a 2x PCR Master Mix.**

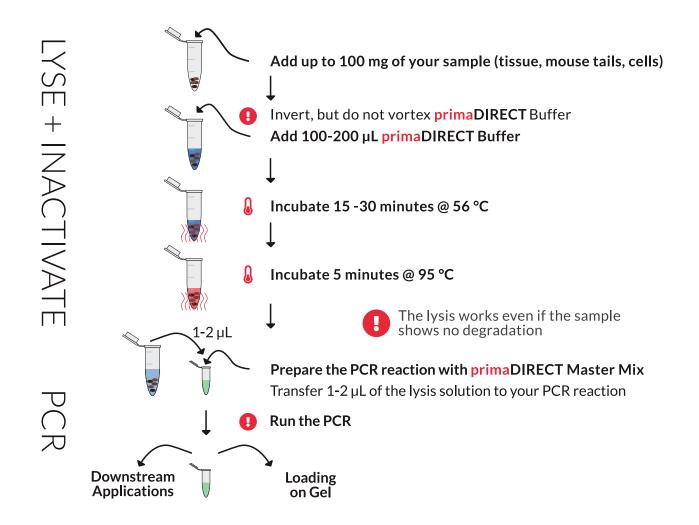
| Components | 25 µL Reaction | Final Concentration |
|---|----------------------|---------------------|
| 2x primaDIRECT Master Mix or other 2x PCR Master Mixes | 12.5 µL | 1x |
| Forward Primer | variable (e.g. 2 µL) | 200 - 400 nM |
| Reverse Primer | variable (e.g. 2 µL) | 200 - 400 nM |
| Lysed Sample | 1-2 µL | - |
| Sterile Water | adjust to 25 µL | |

DID YOU KNOW?

With our **primaDIRECT** 2x Direct-PCR Master Mix you can perform ultra-fast Direct-PCR without further purifications.



GRAPHICAL WORKFLOW



FURTHER INFORMATION

For more information, please visit our website

https://www.steinbrenner-laborsysteme.de

