omega BIO-TEK

innovations in nucleic acid isolation

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E.Z.N.A.® Tissue Direct PCR Kit

Product Number	TQ2310-00
Purifications	20 preps
L1 Buffer	2.5 mL
L2 Buffer	500 µL
PCR Neutralization Buffer	2.5 mL
Direct PCR Buffer (10X)	300 µL
Instruction Manual	✓

New in this Edition: Proteinase K is now premixed with L2 Buffer eliminating the resuspension step prior to use. L2 Buffer can be stored at room temperature for 12 months.

Storage and Stability

All components of the E.Z.N.A.® Tissue Direct PCR Kit are stable for at least 12 months from date of purchase when stored as follows. Store PCR Neutralization Buffer at 2-8°C. L2 Buffer can be stored at room temperature for up to 12 months. For long-term storage, store L2 Buffer at 2-8°C.

User Provided Materials

- Water bath or heating block capable of 56°C
- Water bath or heating block capable of 95°C
- Nuclease-free 1.5 mL microcentrifuge tubes
- Microcentrifuge capable of 13,000 x *g*
- Vortexer

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Before Beginning

- Please take a few minutes to read this pamphlet thoroughly and become familiar with the protocol. Prepare all materials required before starting.
- Follow general lab protection procedures such as wearing gloves and safety glasses when handling any reagent supplied with the kit. Avoid contact with skin.
- The Tissue Direct PCR Kit has been optimized for use with Omega Bio-tek's Direct PCR Buffer (10X) included with this kit. PCR Buffer from other companies may or may not be compatible.

Tissue Direct PCR Protocol

1. Cut 5-10 mg tissue, ear punch, or mouse tail sample and place into a 1.5 mL microcentrifuge tube.
2. Add 100 µL L1 Buffer and 20 µL L2 Buffer. Mix thoroughly by pipetting or vortexing.
3. Incubate for 10 minutes at 56°C.
4. Incubate for 3 minutes at 95°C. The tissue will not be completely digested during incubation. This is normal and will not affect performance.
5. Add 100 µL PCR Neutralization Buffer to the lysate. Mix thoroughly by vortexing.
6. Centrifuge at 13,000*g* for 5 minutes at room temperature.
7. Transfer the supernatant to a new 1.5 mL microcentrifuge tube. Store at 4°C or use immediately in PCR reaction.
8. PCR amplification: Add 1-5 µL lysate to 20-50 µL PCR reaction using Direct PCR Buffer (10X). Add primers, Taq polymerase, dNTP, and $MgCl_2$ for PCR amplification.

   Example: If doing a 50 µL PCR reaction add 5 µL Direct PCR Buffer (10X) and 1-5 µL lysate.

   Note: The volume of lysate should not exceed 10% of the total PCR reaction volume.