# ZEROprep™ DNA Reagent

*For research use only*

**Store at room temperature**

| Catalogue Numbers | Quantity |
|---|---|
| ZDR005 | 500 µl |
| ZDR050 | 50 ml |
| ZDR100 | 100 ml |

Geneaid

CERTIFICATE NO. QAIC/TW/50077
ISO 9001:2008 QMS

### Introduction

ZEROprep™ DNA Reagent is designed for efficient release of DNA for direct use in PCR reactions without purification. A wide variety of samples are effectivly homogenized in the reagent without any pre-treatment or subsequent bind, wash or elution steps. Simply place the sample in the reagent, follow the 2 step protocol and transfer the lysate to a PCR mix.

### Quality Control

ZEROprep™ DNA Reagent is tested on a lot-to-lot basis according to Geneaid's ISO-certified quality management system. DNA from a 1 mg tissue sample is lysed in ZEROprep™ DNA Reagent. A 5 µl aliquot of lysate is added directly into a 50 µl PCR mix.

### Advantages

- Use DNA directly in PCR reactions
- DNA purification is not required
- 15 minute 2 step protocol
- Wide variety of sample types (tissue, blood, plant, bacteria, yeast/fungus, virus)

### Applications

Direct use of DNA in PCR reactions, multiplex PCR, Real-time PCR

### Caution

During operation, always wear a lab coat, disposable gloves, protective goggles or (anti-fog) procedure mask.

## ZEROprep™ DNA Reagent Protocol Procedure

Please read the entire instruction manual prior to starting the Protocol Procedure

| Sample | Procedure |
|---|---|
| Tissue | 1. **Transfer 50 µl of ZEROprep™ DNA Reagent and 1 mg of tissue to a 1.5 ml microcentrifuge tube.**<br>2. Incubate for 15 minutes at room temperature or 5-15 minutes at 80ºC.<br>3. Mix by vortex then transfer a **2-5 µl aliquot** to a **20-50 µl PCR mix**. |
| Plant Tissue[1] | 1. **Transfer 200 µl of ZEROprep™ DNA Reagent and 5-25 mg of tissue to a 1.5 ml microcentrifuge tube.**<br>2. Incubate for 15 minutes at room temperature or 5-15 minutes at 80ºC.<br>3. Mix by vortex then transfer a **2-5 µl aliquot** to a **20-50 µl PCR mix**. |
| Whole Blood, plasma, serum | 1. **Transfer 100 µl of ZEROprep™ DNA Reagent and 5-10 µl of fluid sample to a 1.5 ml microcentrifuge tube.**<br>2. Incubate for 15 minutes at room temperature.<br>3. Mix by vortex then transfer a **2-5 µl aliquot** to a **20-50 µl PCR mix**. |
| Saliva | 1. **Transfer 100 µl of ZEROprep™ DNA Reagent and 10 µl of saliva to a 1.5 ml microcentrifuge tube.**<br>2. Incubate for 15 minutes at room temperature or 10 minutes at 80ºC.<br>3. Mix by vortex then transfer a **2-5 µl aliquot** to a **20-50 µl PCR mix**. |
| Bacteria[2] | 1. **Transfer 100 µl of ZEROprep™ DNA Reagent and 1-5 µl of bacteria culture to a 1.5 ml microcentrifuge tube.**<br>2. Incubate for 15 minutes at room temperature or 10-15 minutes at 80-90ºC.<br>3. Mix by vortex then transfer a **2-5 µl aliquot** to a **20-50 µl PCR mix**. |

NOTE:
[1]For plant species with high levels of polysaccharide inhibitors, increase the tissue amount by 2-3 times per volume of ZEROprep™ DNA Reagent. Plant tissue homogenization using a bead beating instrument or pestle and mortar with liquid nitrogen will facilitate DNA release.
[2]*E.coli* can be efficiently lysed in ZEROprep™ DNA Reagent for 15 minutes at room temperature. However, to efficiently disrupt the bacteria cell wall of gram (+) bacteria, 3 hour incubation at room temperature or 10-15 minutes at 80ºC is required.