For Research Use Only
Store at Room Temperature


IBI SCIENTIFIC

# INSTRUCTION MANUAL

## X-Amp™ DNA Reagent

IB47440, IB47441, IB47442

| Model Numbers: | Quantity: |
|---|---|
| IB47440 | 500 µl |
| IB47441 | 50 ml |
| IB47442 | 100 ml |

# Introduction

IBI X-Amp DNA Reagent is designed for efficient release of DNA for direct use in PCR reactions without purification. A wide variety of samples are effectively 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.

# 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

# Quality Control

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

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

# X-AmpTM DNA PCR Reagent Protocol Procedure

| Sample | Procedure |
|---|---|
| Tissue | 1. Transfer 50 µl of X-Amp 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 X-Amp 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 X-Amp 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 X-Amp 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 X-Amp 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 80-90°C.<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 sample amount by 2-3 times per volume of X-Amp™ DNA PCR 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 X-Amp™ DNA PCR 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 80°C is required.

# IBI Stable Temp PCR Reagents – Ideal for use with IBI X-Amp DNA Reagent

| | | |
|---|---|---|
| IB43101 | No-Dye TAQ Master Mix | 100 RXNS |
| IB43102 | No-Dye TAQ Master Mix | 500 RXNS |
| IB43103 | No-Dye TAQ Master Mix | 1000 RXNS |
| IB43111 | TAQ HotStart No-Dye Master Mix | 100 RXNS |
| IB43112 | TAQ HotStart No-Dye Master Mix | 500 RXNS |
| IB43113 | TAQ HotStart No-Dye Master Mix | 1000 RXNS |
| IB43120 | TAQ KEEN GREEN Master Mix | 100 RXNS |
| IB43121 | TAQ KEEN GREEN Master Mix | 500 RXNS |
| IB43122 | TAQ KEEN GREEN Master Mix | 1000 RXNS |

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