**Cat. No. AEPTDX-1003**

For Research Use Only

# DNrich FFPE Tissue Kit

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## Introduction

The **DNrich** FFPE Tissue Kit provides all of the reagents necessary to extract DNA from a wide variety of Formalin-Fixed Paraffin Embedded tissue sources. DNA purified with this kit is suitable for a variety of applications, including amplification and digestion with restriction endonucleases.

| **DNrich FFPE Tissue Kit components*** | **Cat. No. AEPTDX -1003-050** |
|---|---|
| **G Solution** | **50 ml** |
| **ZR Solution** | **50 ml** |
| **TD Buffer** | **20 ml** |
| **Activator Reagent**** | **2 ml** |
| **VI Buffer** | **15 ml** |
| **PE Buffer** | **15 ml** |
| **Wash Buffer(conc.) **** | **15 ml** |
| **Elution Buffer** | **3 ml** |
| **Manual** | **1** |

* 1.5 ml microcentrifuge tube, **molecular biology grade water** and **absolute ethanol** are needed but are not included.

** Please refer to reminder, **Activator Reagent Preparation** and **Wash Buffer Preparation** before using this kit.

## Chemical Hazard

Always wear gloves and practice standard safety precautions while using the kit. Do NOT disinfect extraction waste in solutions containing **bleach** or any other form of acid. To clean any items contaminated with the reagent, simply soak in detergent and water to remove all traces of contamination before cleaning with bleach or acidic solutions.

## Reminder

Pre-set heather block at 65°C.
Prepare **Activator Reagent** immediately prior to use. Prepared Activator Reagent must be kept at 4°C.
During DNA extraction, **never** open the microtube cap outside the laminar hood.

## Activator Reagent Preparation

Add **2** ml of **molecular biology grade water** to **Activator Reagent**, and vortex it well.
**Note**: Mark the check box on the bottle.
**Note: For the best results, the prepared Activator Reagent should be used immediately. Prepared Activator Reagent can be stored for up to 3 months at 4°C.**

## Wash Buffer Preparation

Add **35 ml molecular grade absolute ethanol** to each **Wash Buffer** bottle before first use and mark the check box on the bottle.

## PROTOCOL

Step 1: **Sample Preparation**

- Cut off **50 mg** (up to 200 mg) of tissue and transfer it to a 1.5 ml microcentrifuge tube.

Step 2: **Paraffin Removal**

- Add **500 µl G Solution** to sample tube and vortex vigorously.
- Incubate at **65°C** for **2** minutes**.**
- Centrifuge at **12000** g for **5** minutes.
- **Decant** the supernatant into waste.
- **Repeat step 2**.

Step 3: **Tissue Washing**

- Add **500 µl ZR Solution** to sample tube and vortex it.
- Centrifuge at **13000** g for **10** minutes.
- **Decant** the supernatant into waste.

Step 4: **Tissue Digestion**

**Note**: Refer to reminder before use activator reagent.

- Add **400 µl** of **TD Buffer** and **40 µl** of **prepared activator reagent** to the sample tube and vortex.
- Incubate at **65°C** for **20 to 30** minutes**.**
  **Note**: During incubation time, vortex vigorously the sample tube every 10 minutes.
- Incubate at **85°C** for **15** minutes**.**

Step 5: **Lysis**

- Add **300 µl** of **VI Buffer** to the sample tube and mix by vortex.
- Keep at **room temperature** for 10 minutes and **invert** each 5 minutes.
- Centrifuge at **12000 g** for **20** minutes.
- Carefully transfer **300 µl of supernatant** to a new 1.5 microcentrifuge tube and do not disturb the phases.

Step 6: **DNA Precipitation**

- Add **300 µl of PE Buffer to** the sample tube and **invert** slowly for 15 times.
- Incubate the samples at **-20°C** for **60** minutes.
  **Note**: In sample with low amount of DNA, incubation time can be up to **overnight**.
- Centrifuge at **12000 g** for **20** minutes.
- **Decant** the supernatant into waste.
  **Note**: While decanting, be careful not to lose the DNA pellet.

Step 7: **Wash**

**Note**: Refer to reminder, before use **Wash Buffer** for the first time.

- Add **500 µl** of **prepared Wash Buffer** to the sample tube, invert slowly for 10 times and then centrifuge at **12 g** for 10 minutes.
- **Decant** the supernatant into waste.
- **Repeat Step 7**.
- **Decant** the supernatant into waste, and let stand until dry.

Step 8: **DNA Elution**

- Add **40 µl of Elution Buffer** to the sample tube.
- Resuspend the DNA for 5 minutes at **room temperature**, and then centrifuge at **8000 g** for 1 minute.
  **Note**: Store DNA at **-20°C.**