



# Introduction

The Fast **DNrich** Saliva Kit provides all of the reagents necessary to extract DNA from saliva. DNA purified with this kit is suitable for a variety of applications, including amplification and digestion with restriction endonucleases.

Fast DNrich Saliva Kit components*	Cat. No. AFSDX1055-50
ST Solution	50 ml
TD Buffer	20 ml
Activator Reagent**	2 ml
VI Buffer	10 ml
SE Buffer	15 ml
Wash Buffer (conc.) **	50 ml
Elution Buffer	3 ml
Column	50
Manual	1

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

\*\* Please refer to 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 -20°C.

# **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 and write the date. **Note:** For the best results, the prepared Activator Reagent should be used immediately. Prepared

Activator Reagent can be stored for up to 3 months or 6 months at 4°C and -20°C, respectively.

# **Wash Buffer Preparation**

Add **35 ml** molecular biology grade **Absolute Ethanol** to **Wash Buffer** bottle before first use and mark the check box on it.



# PROTOCOL

### Step a: Sample Preparation

- a1 Add **2 ml** of saliva to a sterile 2 ml microcentrifuge tube then Centrifuge at **10000 g** for **5** minutes, **Decant** the supernatant into waste.
- a2 Add **1000 µl** of **ST solution** to the sample tube and vortex it well.
- a3 Transfer **300 µl** of sample to a new 1.5 ml microcentrifuge tube.

## Step b: Lysis

- b1 Add 400 μl of TD Buffer and 40 μl of Activator Reagent to the sample tube and vortex vigorously.
- b2 Incubate at 65°C for 30 minutes.Note: During incubation time, vortex the sample tube every 10 minutes.
- b3 Incubate at 85°C for 10 minutes and vortex every 5 minutes.
- b4 (**Optional**) Add **200 μl** of **VI Buffer** to sample tube and vortex vigorously and then keep at RT for **5** minutes.
- b5 Centrifuge at **11500 g** for **5** minutes. **Note:** Do not disturb the phases.
- b6 Carefully transfer about **300µl of supernatant** to a new 1.5 ml tube.
- b7 Add **300μl** of **SE Buffer** to the tube, invert for 5 times and keep at room temperature for **3** minutes and then transfer all the sample to a **spin column**.
- b8 Centrifuge at **2000** g for **2** minutes and **discard** the flow through.

#### Step c: Washing

c1 Add 500 μl of Wash Buffer to the column, centrifuge at 8000 g for 1 minutes and discard the flow through.
c2 Repeat step c1.

## Step d: Column Drying

- d1 Centrifuge at **8000 g** for **1** minute.
- d2 **Discard** the flow through and place the column into a new **1.5 ml** microcentrifuge tube.

### Step e: DNA Elution

- e1 Add **50 μl** of **Elution Buffer** to the center of column and let stay at **RT** for **3** minutes.
- e2 Centrifuge at 10000 g for 2 minutes.

## Note: Store DNA at -20°C.

## **Short Protocol**

## Step a: Sample Preparation

- a1 Add **2 ml** of saliva to a sterile 2 ml microcentrifuge tube then Centrifuge at **10000 g** for **5** minutes, **Decant** the supernatant into waste.
- a2 Add **1000 µl** of **ST solution** to the sample tube and vortex it well.
- a3 Transfer **300 µl** of sample to a new 1.5 ml microcentrifuge tube.

#### Step b: Lysis

- b1 Add 400 μl of TD Buffer and 40 μl of Activator Reagent to the sample tube and vortex vigorously.
- b2 Incubate at 65°C for 30 minutes.
- b3 Incubate at **85°C** for **10** minutes.
- b4 Centrifuge at 11500 g for 5 minutes.
- b5 Carefully transfer about **300µl of supernatant** to a **spin column**.
- b6 Centrifuge at **2000** g for **2** minutes and **discard** the flow through.

### Step c: Washing

- c1 Add 500 μl of Wash Buffer to the column, centrifuge at 8000 g for 1 minutes and discard the flow through.
- c2 Repeat step c1.

### Step d: Column Drying

- d1 Centrifuge at 8000 g for 1 minute.
- d2 **Discard** the flow through and place the column into a new **1.5 ml** microcentrifuge tube.

## Step e: DNA Elution

- e1 Add **50 μl** of **Elution Buffer** to the center of column and let stay at **RT** for **3** minutes.
- e2 Centrifuge at 10000 g for 2 minutes.







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