



KIAGENE FANAVAR

## REDNAKIA PLUS

### Blood and Body Fluids isolation kit (Solution Based)

#### Cat. No:

FPKT026.0025

FPKT026.0050

FPKT026.0100

#### Contents:

| Components          | 25 preps | 50 preps | 100 preps |
|---------------------|----------|----------|-----------|
| RD1 Buffer (RED)    | 50 ml    | 100 ml   | 200 ml    |
| RD2 Buffer (Orange) | 7.5 ml   | 15 ml    | 30 ml     |
| RD3 Buffer (Yellow) | 7.5 ml   | 15 ml    | 30 ml     |
| PEB Buffer          | 1.5 ml   | 2.5 ml   | 5 ml      |

#### Kit storage:

⚠ This kit should be stored at room temperature.

If properly stored, all kit components are stable until the expiration date printed on the label.

#### Additional Equipment and Reagent required

- Absolute ethanol
- Ethanol 70%
- Chloroform
- Standard tabletop microcentrifuge capable of 13,000 x g centrifugal force
- Microcentrifuge tubes, 1.5 ml, sterile

#### Application

This kit provides a convenient and rapid method to isolate total DNA from fresh, frozen and preserved Blood, plasma, body fluids or Amniotic Fluid samples. The purified DNA is of the highest quality and is fully compatible with all downstream applications such as PCR, qPCR, NGS and microarrays.

The procedure is optimized to achieve reliable results within **15 min**.

#### Handling Requirements and Safety Information

⚠ *All solutions are clear and should not be used when precipitates have formed. Warm the solutions at +15 to +25°C or in a 37°C water bath until the precipitates have dissolved.*

⚠ *Do not allow Chloroform to touch your skin, eyes, or mucous membranes. If contact does occur, wash the affected area immediately with large amounts of water.*

⚠ *If you spill the reagent, dilute the spill with water before wiping it up.*

⚠ *Do not use any modified ethanol.*

⚠ *Do not pool reagents from different lot numbers.*

⚠ *Wear protective disposable gloves, laboratory coats and eye protection, when handling samples and kit reagents.*

⚠ *Do not contaminate the reagents with bacteria, virus, or nucleases. Use disposable pipets and nuclease free pipet tips only, to remove aliquots from reagent bottles.*

#### preparation procedure:

⚠ *before starting Incubate the PEB buffer at 55 to 65 ° C until the end of the protocol to obtain the maximum yields.*

#### Protocol

**1. Add 1 ml RD1 Buffer** to the 2ml microtube and **add 500 µl Blood or 800 µl serum, plasma, body fluids or Amniotic Fluid** samples. Mix gently (don't Vortex) and centrifuge at maximum speed for 1 minutes.

**2. Discard the supernatant and add 1ml RD1 Buffer again.** Mix gently (don't Vortex) and centrifuge at maximum speed for 1 minutes.

**3. Discard the supernatant and Add 300 µl RD2 Buffer.** Pipette completely.

**4. Add 300 µl RD3 Buffer** then **add 600 µl Chloroform** mix vigorously for 10 seconds (don't Vortex). **Centrifuge at 7000 RPM for 4 min.**

**5. Transfer the upper solution layer into a 1.5 ml microtube** gently. Add **1000 µl chilled Absolute ethanol** to the sample. **mix gently** (don't Vortex). Centrifuge at **Maximum speed for 2 min at +4°C.** (a thin and white pellet should be seen in bottom of microtube).

**6. Discard supernatant carefully. Add 1ml Ethanol 70%** and invert several. Centrifuge at **Maximum speed for 2 min at +4°C.**

**7. Discard supernatant carefully.** to remove residual ethanol, **incubate microtube at +55°C on hot plate for 5-10 min.**

**8. Add 50 µl PEB Buffer or sterile DDW** on pellet and pipetage gently.

**9. Check 5-10 µl of extracted DNA** by 1% agarose gel electrophoresis. Store DNA at -20°C.

**Contact and Support:** If you have questions or experience problems with Kiagene Fanavar products, please contact our Technical Support staff. Our scientists are committed to providing rapid and effective help. Website: [www.kiagene.ir](http://www.kiagene.ir) Email: [Techsupport@kiagene.ir](mailto:Techsupport@kiagene.ir) Tel: 02191010809