In the name of God



Viral DNA extraction kit (For research use with clinical application CN: KPG-VDNKP)

Component of viral DNK-Plus kit:

• DNK solution (CN: KPG-DNK), 2 vial 20 mL

• Solution A (CN: KPG-SoA), 1 vial 5 mL

• Percipitation (CN: KPG-PS), 1 vial 30 mL

• Carrier (CN: KPG-CRGL), 1 vial 6 mL

Washing solution (CN: KPG-WS), 1 vial 25 mL

• DNase free water (CN: KPG-DW), 1 vial 3 mL

Other materials needed: Samplers, Centrifuge, 1.5 mL tubes

Samples: This kit was designed to extract viral DNA from serum. However, it can be used to extract DNA from other purposes. In the case use the kit for extraction DNA from the other sources add the following volume:

1. Blood/Serum/Plasma: 150 µL.

2. Cell culture: Up to 1×107 cells

3. Homogenized tissues: 30-50 mg (The tissues need to be homogenized previously)

Experimental procedure

- Add 400 μL of DNK solution to a new tube and then add 150 μL serum (And the appropriate samples volume for other tissues) to the tube. Vigorously vortex the tube and incubate for 5 minutes in the room temperature.
- Add 50 μL of solution A to the tube and, then vigorously vortex the tube and incubate for 2 minutes at room temperature.
- Centrifuge the tube at 13000 rpm for 5 minutes.
- Transfer the watery supernatant to a new tube and add 60 μL carrier to the tube and then gently mix the tube component and incubate for 5 minutes and then add 300 μL of precipitation, then gently mix the tube component and incubate for 5 minutes at -10°C (Freezer).
- Centrifuge the tube at 13000 rpm for 5 minutes and, then dispose all of the supernatant (DNA is attached to the tube in this stage).
- Add 250 μL washing solution and, then gently mix the tube component.
- Centrifuge the tube at 8000 rpm for 5 minutes.
- Dispose all of the supernatant (DNA is attached to the tube in this stage). Use tissue paper to remove the left over washing solution.
- Incubate the tube in the room temperature for 3 minutes to allow the samples to be up-to-dry.
- Add 30 μ L DNase free water and incubate at 60°C for 5 minutes. Due to the high yield of DNA by DNK-Plus kit, you can add higher amount of DNase free water up to 50 μ L.

Note: To increase the yield of DNA, you can add lower amounts of DNase free water or multiply the volume. For example, add 500 µL DNK to 250 µL blood and ETC.

Safety directions: The DNK and solution A are tissue hazard materials, hence, in the cases of contact with skin, eyes and ETC, wash with water and refer to hospital for additional medications.



