In the name of God

COVID-19 RNA Extraction Kit (CN: KPG-VDREK) 100 reactions

Components of the kit:

- Lysis solution (CN: KPG-KLS), 2 vials 20 mL
- Precipitation buffer (CN: KPG-PS), 2 vials 10 mL
- Washing solution (CN: KPG-WS), 2 vials 25 mL
- DNase/RNase-free water (CN: KPG-DW), 1 vials 10 mL
- Carrier (CN: KPG-Cr),1 microtube 1mL
- High absorbance column 100 pcs
- Collection tubes 300 pcs

Other materials are needed: Samplers, Centrifuge, 1.5 ml microtubes

Samples: This kit was designed to extract COVID-19 RNA from serum, plasma, Cell-free virus transfer media, cell culture, and homogenized tissues. To extract COVID-19 RNA from the various sources, add the following volume:

- 1. Blood/Serum/Plasma/Cell-free virus transfer media: 200 μL.
- 2. Cell culture: Up to 1×10^7 cells.
- 3. Homogenized tissues: 30-50 mg (The tissues need to be homogenized previously).

Experimental procedure

- Add 400 μL of Lysis solution to a microtube.
- Add the appropriate samples (200 μL) to the microtube and then vortex for 15 seconds, vigorously.
- Incubate for 6 min at room temperature.
- Add 10 µL Carrier to the microtube and then vortex for 5 seconds.
- Add 200 μL of Precipitation buffer to the microtube and then vigorously vortex the tube for 5 seconds.
- Add complete lysate to the high absorbance column.
- Centrifuge the microtube at 8000 rpm for 1 min.
- Change the Collection tube.
- Add 500 μL of washing solution to the High absorbance column.
- Centrifuge the tube at 8000 rpm for 1min.
- Centrifuge the tube at 12000 rpm for 1min.
- Transfer the high absorbance column to a DNase/RNase-free microtube.
- Add 70 μL pre-warm (60 °C) DNase/RNase-free water to the high absorbance column and incubate for 1-2 min at room temperature.
- Centrifuge the tube at 12000 rpm for 1 minute. The RNA is ready for use or storage at -20/-70 °C.

Note: To increase the yield of **COVID-19 RNA**, you can transfer the product to the high absorbance column again and centrifuge the tube at 12000 rpm for 45 seconds.

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



