DATA SHEET

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Biotecnologia ao seu alcance

Virus RNA+DNA Preparation Kit

Spin column based RNA+DNA purification from plasma, serum, swab, cell-culture

Cat. Nº.	Amount
☐ DPK-115S	50 preparations
☐ DPK-115L	250 preparations

Shipping:
Shipped at ambient temperature

Storage Conditions:
Store at ambient temperature.

Shelf life:
12 months

For *in vitro* use only!

Kit Contents:

- Lysis Buffer
- Washing Buffer A
- Washing Buffer B
- Elution Buffer
- Spin Columns and Collection Tubes

Additional Materials Required:

- 96-99 % Ethanol
- 1.5 ml microtubes

Description:

Viral RNA+DNA Preparation Kit is designed for rapid and effective isolation of RNA and DNA from virus. Samples can be plasma/blood, serum, other cell-culture and respiratory specimens. The Kit is specifically designed to isolate high-quality nucleic acids using low elution volumes and allowing sensitive downstream analysis including quantitative PCR and RT-PCR. The purified RNA/DNA is free of proteins and nucleases. Viral RNA+DNA Preparation Kit uses lysis buffer with carrier molecule that helps RNA/DNA binding on the column membrane and additional carrier (tRNA or poly-A) is not required. Also uses advanced silica-gel membrane technology for fast purification of intact RNA/DNA. The preparation procedure is optimized to give reproducible results within 30 min.

Preparation Procedure:

- Before start, add the following components (not included in the kit) as indicated on the respective bottle
- :96-99 % Ethanol to Washing Buffer A and Washing Buffer B.

Buffer	DPK-115S 50 preps	DPK-115L 250 preps
Lysis Buffer	15 ml	70 ml
Washing Buffer A	15 ml (add 15 ml ethanol)	70 ml (add 70 ml ethanol)
Washing Buffer B	6 ml (add 24 ml ethanol)	27,5 ml (add 110 ml ethanol)
Elution Buffer	3 ml	15 ml

1. Sample Preparation and Cell Lysis:

1.a Lysate Preparation

- Transfer 100 µl of inicial sample into a 1.5 ml microtube.
- Note: Adjust lower sample volumes with PBS Buffer to 150 µl. Samples of larger volumes (up to 300 µl) can easily be scaled up but may require larger tubes for the lysis procedure.
- Add 250 µl of Lysis Buffer.
- Vortex for 15 sec.
- Incubate at room temperature (20-25 °C) for 10 min.

2. Column Loading

- Add 250 µl of Absolute ethanol to the lysate.
- Vortex for 5 sec.
- Carefully apply 600 µl of the lysate on the column and centrifuge at 13,000 g for 1 min.
- Discard the flow-through in the collection tube and place the column back in the same tube.

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3. Column Washing

- Add 500 µl Washing Buffer A (ethanol added) to the Spin Column and centrifuge at 13,000 g for 1 min.
- Discard the flow-through in the collection tube and place the Spin Column back in the same tube.
- Add 500 µl Washing Buffer B (ethanol added) to the Spin Column and centrifuge at 13,000 g for 2 min.
- Discard the flow-through in the collection tube and place the Spin Column back in the same tube.
- Centrifuge at 13,000 g for 1 min.
- Note: It is important to dry the membrane since residual ethanol may interfere with downstream reactions.

4. Elution

- Place the Spin Column into a new 1.5 ml microtube.
- Add 40-50 µl Elution Buffer directly onto the membrane of the spin column.
- Note: Avoid touching membrane with the pipet tip.
- Incubate at room temperature for 1 min.
- Centrifuge at 13,000 g for 1 min.
- The eluted RNA and/or DNA is ready for down-stream processing. Use 2-5 µl as template for PCR or RT-PCR.