Swab/Saliva Viral DNA/RNA Extraction Kit (Spin Column)

Catalog No.: V4001 Size: 100 preps

CE IVD

Description

The Swab/Saliva Viral DNA/RNA Extraction Kit (Spin Column) is suitable for rapid extraction of high purity viral nucleic acid from plasma, serum, nasopharyngeal swab, sputum, bronchus/alveolar lavage fluid, ascites, culture cell supernatant and urine. This kit is based on the silica gel column purification method. The sample is homogenized in the lysis buffer and the nucleic acid is released into the buffer. The lysis buffer contains a high concentration of guanidine. In this condition, the membrane absorbs nucleic acid by hydrogen bond and electrostatic physical and chemical action, while proteins and other impurities are not absorbed. The lysate is transferred to the adsorption column for filtration, and the nucleic acid filter membrane is washed to remove residual proteins and other impurities, and finally eluted by the low-salt buffer solution. The obtained nucleic acids can be directly used in downstream related experiments such as reverse transcription, PCR, RT-PCR, fluorescence quantitative PCR, second-generation sequencing and Northern hybridization.

Main components

The kit consists of the following components:

The name of the reagent	Amount	Component description
Lysis Buffer	50 ml	Provide environment for lysing and binding to the column
Wash Buffer	24 ml	Remove residual proteins and other impurities
Elute Buffer	6 ml	Nuclease-free solution
Spin Column	50 pcs × 2	Adsorb viral nucleic acid and collect the filtrate

Storage conditions

Store at room temperature (15-25°C) and transport at room temperature.

Notes

1. Prepare your own RNase-free pipette tips, 1.5 ml RNase-free centrifuge tubes, centrifuge, etc.
2. The virus has a strong ability to infect, a variety of defense measures must be done before the operation.
3. Avoid repeated freezing-thawing of samples, otherwise the extracted viral RNA will be degraded and the extracted amount will decrease.
4. All operating procedures, if not specified, are carried out at room temperature (15-25°C).
5. When using this kit, please wear lab coat, disposable latex gloves, disposable masks and use RNase-free consumables to avoid RNase pollution to the greatest extent.
6. Please check whether there is crystal precipitation in the Lysis Buffer. If there is crystal precipitation, place it at room temperature or 37°C until the crystal is dissolved. Mix it before use.

Before use:

Add 96 ml anhydrous ethanol to Wash Buffer, and store at room temperature.

Protocol

1. Add 500 µl of Lysis Buffer into a 1.5 ml RNase-free centrifuge tube (self-prepared). If there are many samples, the Lysis Buffer can be pre-packed.
2. Add 200 µl of samples, mix thoroughly by vortexing (if the sample is less than 200 µl, fill it with normal saline to 200 µl).
3. Transfer the above mixture to the Spin Column (with Collection Tube). Centrifuged at 12,000×g for 1 min.

4. Discard the filtrate and put the Spin Column back into the 2 ml Collection Tube. Add 600 μl of Wash Buffer and centrifuge at 12,000×g for 30 sec, then discard the filtrate.
Note: make sure the correct amount of anhydrous ethanol has been added to the Wash Buffer.
5. Repeat step 4 once.
6. Centrifuge for 2 min at 12,000×g to dry the column membrane. Discard the filtrate and collection tube.
7. Transfer the Spin Column to a new 1.5 ml RNase-free centrifuge tube (self-prepared), add 50 μl Elute Buffer to the center of the membrane of the Spin Column, and place it at room temperature for 1 min. Centrifuge at 12,000×g for 1 min.
8. Discard the Spin Column, the obtained DNA/RNA can be directly used for subsequent detection, or be stored at -30 ~ -15°C for short-term storage or at -70°C for long-term storage.

Simple Process

Add 500 μl Lysis Buffer, 200 μl sample, mix thoroughly by votexing.

Transfer the mixture to the Spin Column and centrifuged at 12,000×g for 1 min.
Add 600 μl Wash Buffer to the Spin Column and centrifuge at 12,000×g for 30 sec. (twice)
Centrifuge at 12,000×g for 2 min with empty column.

Add 50 μl Elute Buffer, place it at room temperature for 1 min, and centrifuge at 12,000×g for 1 min.

[Explanation of Marks]

IVD	The product is used in vitro, please don't swallow it		Please don't reuse it
	Validity		Please read the instruction book carefully before using
	Warning, please refer to the instructions in the annex		Manufacturer
2℃ 8℃	Temperature scope within which the product is reserved	LOT	Batch number
EC REP	European union authorization representative		Keep dry

	Avoid overexposure to the sun		Don't use the product when the package is damaged
CE	The product meets the basic requirements of European in vitro diagnostic medical devices directive 98/79/EC		

[Basic Information]

Guangzhou Dongsheng Biotech Co., Ltd.

Room 305, 307, 309, Building A, No. 179, Guangpu East Road, Huangpu District, Guangzhou 510760, China

EC REP

Caretechion GmbH

Niederrheinstr 71, 40474 Duesseldorf, Germany