【Product Name】HiPure Viral DNA/RNA Kit

【Product specifications】100 Preps/Kit

【Intended Use】

This kit is used for extracting total viral nucleic acid from non-cell/low cell content biological samples such as body fluid, serum, plasma, immersion solution, tissue homogenate supernatant, culture supernatant, etc., the extracted products can be used for clinical in vitro detection.

【Principle】

This product is based on silica gel purification. The sample is lysed and digested with lysate and protease, DNA / RNA is released into the lysate. Transfer to an adsorption plate and filter column. DNA/RNA is adsorbed on the membrane, while protein is not adsorbed and is removed with filtration. After washing proteins and other impurities, DNA / RNA was finally eluted with low-salt buffer (10 Mm Tris, pH 8.0).

【Main Composition】

Cat.No	IVD4173	Contents
HiPure Viral Mini Column	100	Adsorption column
2ml Collection Tubes	200	PP Column
PK/Carrier RNA	50 mg	Protease/Poly A
Protease Dissolve Buffer	5 ml	Glycerol/Tris/CaCl2
Buffer AL	30 ml	Tris/EDTA/Guanidine Salt
Buffer MW1*	44 ml	Tris/EDTA/Guanidine Salt
Buffer MW2*	50 ml	Tris/EDTA/NaCl
Nuclease Free Water	15 ml	10mm Tris,pH8.0

【Storage conditions and validity】

This kit is shipped and stored at room temperature and is valid for 12months.

【Sample Requirements】

The kit is suitable for extracting viral DNA/RNA from non-cell/low cell content biological samples such as body fluid, serum, plasma, immersion solution, tissue homogenate supernatant, culture supernatant, etc.. As viral nucleic acid is easy to degrade, it is recommended to detect nucleic acid immediately after obtaining it, or freeze it at -20°C in a short time and store it at -80°C for a long time in order to ensure the quality of detection.

【Preparation before Use】

- Dissolve PK/Carrier RNA: Add 2.5mL Protease Dissolve Buffer Blue to the bottle of PK/Carrier RNA, and store at -20°C after dissolve.
- Add 56 ml Absolute ethanol to the bottle of Buffer MW1, and store at room temperature.
- Add 200 ml Absolute ethanol to the bottle of Buffer MW2, and store at room temperature.

【 Protocol 】

1. Pipet 20μl PK/Carrier RNA into a 1.5 ml microcentrifuge tube (not provided).
2. **Add 200μl of plasma or serum into the microcentrifuge tube.**

   If the sample volume is less than 200 μl, add the appropriate volume of 0.9% sodium chloride solution to bring the volume of sample up to a total of 200 μl.
3. **And 200μl Buffer AL to the tube and mix thoroughly by vortex for 15 seconds.**

   In order to ensure efficient lysis, it is essential that the sample and Buffer AL are mixed thoroughly to yield a homogeneous solution. Note: Do not add PK/Carrier RNA directly to Buffer AL.
4. Incubate at 70°C for 10 min in a heating block.
5. Briefly centrifuge the 1.5 ml tube to remove drops from the inside of the lid.
6. **Add 250μl of ethanol (96–100%) to the sample, close the cap and mix thoroughly by pulse-vortexing for 15 s.**

   If ambient temperature exceeds 25°C, ethanol should be cooled on ice before adding to the lysate.
7. Briefly centrifuge the 1.5 ml tube to remove drops from the inside of the lid.
8. **Take out a new HiPure Viral column and place the column into a new 2ml collection Tube.**
9. Transfer ~650μl of the sample to the column. Centrifuge at 12,000 x g for 30-60 seconds.

10. Place the column in a clean 2 ml collection tube, and discard the collection tube containing the filtrate. **Add 500μl Buffer MW1 to the column.** Centrifuge at 12,000 × g for 30-60 seconds.

11. Discard the filtrate and place the column back into the collection tube. **Add 500μl Buffer MW2 to the column.** Centrifuge at 12,000 × g for 30-60 seconds.

12. (Optional) Discard the filtrate and place the column back into the collection tube. **Add 500μl Buffer MW2 to the column.** Centrifuge at 12,000 × g for 30-60 seconds.

13. Discard the filtrate and place the column back into the collection tube. Centrifuge the column at 12,000 × g for 3 minutes to dry the column.

14. **Recommended:** Transfer the column to a new 1.5 ml centrifuge tube (not provided), open the lid, and incubate the assembly at 56°C for 3 min to dry the membrane completely.

15. **Add 20~100μl Nuclease Free Water to the center of the membrane of the column.** Close the lid and incubate at room temperature for 1 min. Centrifuge at 12,000 × g for 1 minute.

    Important: Ensure that the elution buffer is equilibrated to room temperature. If elution is done in small volumes (<50 μl), the elution buffer must be dispensed onto the center of the membrane for complete elution of bound RNA and DNA. Elution volume is flexible and can be adapted according to the requirements of the downstream application. Remember that the recovered eluate volume will be approximately 5 μl less than the elution buffer volume applied onto the column. Incubating thee column loaded with Nuclease Free Water for 5 min at room temperature before centrifugation generally increases DNA and RNA yield.

【Product performance】

- Appearance inspection: The kit should be completely composed, the appearance of the package should be clean, no leakage, and no damage; the signs and labels should be clear.
- Nucleic acid purity: Extract 1mg liver homogenate (PBS, 200μl) according to the instructions. The OD260 / 280 value is 1.7-2.0, A260 / 230 value is 1.2-1.8.
- Nucleic acid yield: Extract 1mg liver homogenate (PBS, 200μl) according to the instructions, the yield is 2~ 5ug.
- Nucleic acid integrity: 1mg liver homogenate (200μl) was extracted according to the instructions. There was no obvious degradation of DNA / RNA during electrophoresis of the product.

【Basic Information】

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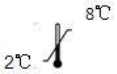
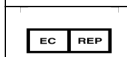
【Explanation of Marks】

	The product is used in vitro, please don't swallow		Please don't reuse it
	Validity		Please read the instruction book carefully before using
	Warning, please refer to the instructions in the annex		Manufacturer
	Temperature scope within which the product is reserve		Batch number
	European union authorization representativ		Keep dry
	Avoid overexposure to the sun		Don't use the product when the package is damaged
	The product meets the basic requirements of European in vitro diagnostic medical devices directive 98/79/EC		