MEBEP TECH(HK) Co., Limited
Email: sales@mebep.com Website: www.mebep.com
Tel: +86-755-86134126 WhatsApp/Facebook/Twitter: +86-189-22896756

Virus RNA Fast Kit

Product Number: RNK2701

Shipping and Storage

Storage at room temperature for 12 months does not affect the effectiveness of use, and each solution should be covered tightly in a timely manner after use.All solutions should be clear. If the ambient temperature is low, the solution may form precipitates and should not be used directly. It can be heated in a 37℃ water bath for a few minutes to restore clarity

Components

Component	Storage	RNK2701 50 Preps
Buffer RLB	RT	20 ml
Buffer PE	RT	16 ml
Buffer RW	RT	10 ml
RNase-free H_2O	RT	5 ml
RNase free adsorption column RA and collection tube	RT	50

Description

The virus RNA extraction kit is suitable for rapidly extracting high-purity virus RNA from cell-free body fluids, including plasma, serum, ascites, cultured cell supernatant, cerebrospinal fluid, and urine, using a centrifugation adsorption column that specifically binds to virus RNA and a unique buffer system. This product can meet the extraction requirements of most viral RNA, such as viral RNA: HCV (hepatitis C virus), HIV (HIV), and HTLV (human T-lymphotropic virus); Wait a minute. After virus lysis, RNA selectively adsorbs onto the silica matrix membrane in a highly dissociated salt state, and then undergoes a series of rapid rinsing centrifugation steps to remove impurities such as salt, cellular metabolites, proteins, etc. Finally, pure viral RNA is eluted from the silica matrix membrane using a low salt elution buffer. The purified viral nucleic acid is free of impurities and PCR inhibitors, and can be directly used for analysis such as PCR/RT-PCR.

Features

1. It does not require the use of toxic reagents such as phenol, nor does it require steps such as ethanol precipitation.
2. Time saving, concise, and single sample operation can generally be completed within 20 minutes.
3. Multiple column washes ensure high purity, and the extracted viral RNA has high purity, stable and reliable quality, making it suitable for various routine operations, including PCR/RT-PCR, etc.

Protocol

Note:Before the first use, please add the specified amount of anhydrous ethanol to the Buffer RW bottle according to the instructions on the label!

1. 200μl of serum and other body fluids (need to be returned to room temperature, if insufficient, 0.9% NaCl or PBS can be used to supplement) are transferred into the aforementioned 1.5ml centrifuge tube, and 400ul of Buffer RLB is added. Immediately vortex and shake thoroughly to mix well.
2. Place at room temperature (15-25℃) for 10 minutes, shake and mix well every 5 minutes.
3. Add 450μl of anhydrous ethanol and immediately vortex and shake thoroughly to mix well.
   If the surrounding environment is above 25℃, ethanol needs to be pre cooled on ice before being added.
4. Add the above mixture to an adsorption column RA, centrifuge at 13000rpm for 30-60 seconds (with the adsorption column placed in the collection tube), and discard the waste liquid in the collection tube.
   If the total volume exceeds 750μl, the solution can be added twice to the same adsorption column RA.

5. Add 500μl buffer PE, centrifuge at 12000rpm for 30 seconds, and discard the waste liquid.
6. Add 500μl of Buffer RW (please check if anhydrous ethanol has been added first!), centrifuge at 12000rpm for 30 seconds, discard the waste liquid, add 500μl of Buffer RW, and repeat.
7. Put the adsorption column RA back into the empty collection tube, centrifuge at 13000rpm for 2 minutes, and try to remove Buffer RW as much as possible to avoid residual ethanol in Buffer RW inhibiting downstream reactions.
8. Take out the adsorption column RA and place it in an RNase free centrifuge tube. Add 30-50μl of RNase free H_2O in the middle of the adsorption membrane (better heating effect in a 65-70℃ water bath beforehand), leave at room temperature for 1 minute, and centrifuge at 12000 rpm for 1 minute. If you want to obtain a large amount of RNA, you can add the obtained solution back to the centrifuge adsorption column and centrifuge at 12000 rpm for 1 minute.

   The larger the elution volume, the higher the elution efficiency. If a high RNA concentration is required, the elution volume can be appropriately reduced, but the minimum volume should not be less than 20μl. If the volume is too small, it will reduce the elution efficiency and RNA production.
9. It is recommended to use RNA viruses immediately, otherwise they should be stored at -70℃ for short-term use.