

BILATEST Viral DNA/RNA Kit

100 Extractions

Product description

The BILATEST Viral DNA/RNA Kit is designed for the simultaneous isolation of viral DNA and RNA from serum, plasma or blood.

The complete protocol takes approximately 45 minutes.

Included reagents

Reagent	Volume
(1) Lysis Buffer	20 ml
(2) Magnetic Beads	3 ml
(3) Binding Buffer	60 ml
(4) Washing Buffer A	50 ml
(5) Washing Buffer B	50 ml
(6) Washing Buffer C	55 ml
(7) Elution Buffer	10 ml
Poly(A) RNA	400 µg
Poly(A)RNA Buffer	500 µl
Protease	20 mg

The **Elution Buffer (7)** is 10 mM Tris-HCl pH 8.0, it is also possible to use TE buffer pH 8.0.

This kit contains enough materials for 100 isolations from 200 µl of serum, plasma or blood.

Required Materials

This kit is optimized for use with BILATEC magnetic separators (e.g. BILATEST Magnetic Separator M 12+12 for 1.5 ml tubes, Order-No. 210141).

Buffer Preparation and Storage Conditions

Store **Lysis Buffer (1)** in the dark.

Lysis Buffer (1) may form a precipitate upon storage. If necessary, warm to 40°C to redissolve.

Lyophilized **Poly(A)RNA** and **Protease** are stable for 1 year at room temperature.

Dissolve the lyophilized **Poly(A)RNA** by adding **440 µl** of the **Poly(A)RNA buffer** to the **Poly(A)RNA** tube and mix thoroughly.

Dissolved **Poly(A)RNA** in **Poly(A)RNA buffer** must be stored at **4°C** and is then stable for up to 6 months.

It is possible to premix **Lysis Buffer (1)** and **Poly(A)RNA**. You should take into account that it's not recommended to warm the buffer containing the **Poly(A)RNA** more than 6 times.

Dissolve lyophilized **Protease** in **1 ml Aqua dest.** to obtain a final concentration of 20 mg/ml.

Dissolved Protease should be **stored at 4°C**.

Purification Protocol for viral DNA/RNA from 200 µl of serum, plasma or blood

1. In a microfuge tube place **10 µl Protease**, **4 µl Poly(A)RNA** (dissolved in Poly(A)RNA buffer) and **200 µl Lysis Buffer (1)**. Add **200 µl sample**, mix well and then incubate **10 minutes at 55°C**.
2. Add **30 µl** resuspended **Magnetic Beads (2)** and **600 µl Binding Buffer (3)**. Mix with 6 pipetting strokes and incubate 5 minutes at room temperature.
3. Following incubation, place the tube in a Magnetic Separator to draw the beads to the side of the tube for 2 minutes. Discard the supernatant and then remove the tube from the magnet.
4. Add **500 µl Washing Buffer A (4)** to the tube. Resuspend the beads by pipetting and leave 1 minute. Separate the beads using the Magnetic Separator and discard supernatant.
5. Repeat the washing procedure using **Washing Buffer B (5)**.
6. Separate the beads magnetically and remove the supernatant. Then, while leaving the tube in the Magnetic Separator and the beads attracted to the side of the tube, gently add **550 µl** of **cold Washing Buffer C (6)**, being careful not to disrupt the pellet. Pipette off all **Washing Buffer C (6)** one minute after addition.
7. Add **50 µl** (or another suitable volume) of **Elution Buffer (7)** to the tube and resuspend the beads by pipetting.
8. Incubate the suspension for **5 minutes at 55°C**, with gentle agitation to facilitate complete DNA/RNA elution.
9. Following DNA/RNA elution place the tube in the Magnetic Separator for 1 minute to separate all the beads from solution. Transfer the eluate containing the purified viral DNA and RNA to a clean tube.