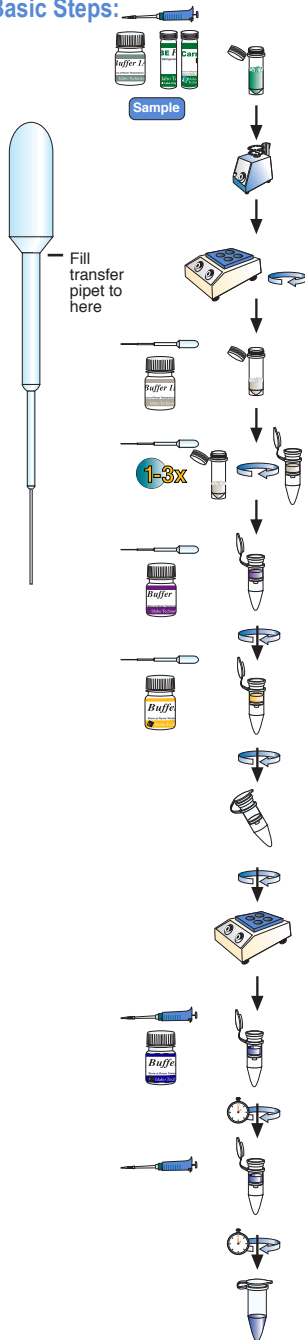


**DNA/RNA Protocol
 Basic Steps:**



Whole Blood (RNA)

Preparation

- Add **600 µl Buffer 1A** to a Small Dry Bead Tube.
- Add **20 µl VIBE Protease** and **30 µl Carrier RNA**.
- Add **400 µl** spun plasma sample to the tube and invert to mix. (See specific protocol details.)

Lysis

- No bead beating is required.
- Incubate in dry heat block set to **65°C for 10 minutes** and pulse centrifuge to eliminate foam.

Bind

- Add **300 µl** of **Buffer 1B** invert to mix.
- Load spin filter with mixture using small transfer pipet twice. Centrifuge each load 2 minutes and pour off flow-through between loads. After the final load, transfer spin filter to new receiver tube.

Wash

- Fill a small transfer pipet with **Buffer 1C** and add it to the spin filter.
- Centrifuge for 2 minutes and pour off flow-through.
- Fill a small transfer pipet with **Buffer 2** and add it to the spin filter.
- Centrifuge for 2 minutes and move spin filter to a new Receiver tube.
- Centrifuge for 3 minutes and move spin filter to a new Receiver tube.
- Incubate uncapped tube for 5 minutes in a dry heat block at **88-95°C**.

Elute

- Using a Pipettor, add **100 µl** of **Buffer 3** to the spin filter.
- Let sit for 2 minutes, then centrifuge for 2 minutes.

Re-Elute

- Using a pipettor, pipet the spin-through liquid back onto the small spin filter.
- Let sit for 2 minutes, then centrifuge for 2 minutes.

Keep receiver tube containing purified sample and test as soon as possible.

Nasal Swab (RNA)

Preparation

- Add **400 µl Buffer 1A** to a Small Dry Bead Tube.
- Add **20 µl VIBE Protease** and **30 µl Carrier RNA**.
- Add **cut nasal swab** into the tube and invert to mix. (See specific protocol details.)

Lysis

- Bead beat for **1 minute**.
- Incubate in dry heat block set to **65°C for 10 minutes** and pulse centrifuge to eliminate foam.

Bind

- Add **200 µl** of **Buffer 1B** and invert to mix.
- Load spin filter with mixture using small transfer pipet.
- Centrifuge for 2 minutes and transfer spin filter to new receiver tube.

Wash

- Fill a small transfer pipet with **Buffer 1C** and add it to the spin filter.
- Centrifuge for 2 minutes and pour off flow-through.
- Fill a small transfer pipet with **Buffer 2** and add it to the spin filter.
- Centrifuge for 2 minutes and move spin filter to a new Receiver tube.
- Centrifuge for 3 minutes and move spin filter to a new Receiver tube.
- Incubate uncapped tube for 5 minutes in a dry heat block at **88-95°C**.

Elute

- Using a Pipettor, add **100 µl** of **Buffer 3** to the spin filter.
- Let sit for 2 minutes, then centrifuge for 2 minutes.

Re-Elute

- Using a pipettor, pipet the spin-through liquid back onto the small spin filter.
- Let sit for 2 minutes, then centrifuge for 2 minutes.

Keep receiver tube containing purified sample and test as soon as possible.

Sputum (DNA/RNA)

Preparation

- Add **800 µl Buffer 1A** to a Small Dry Bead Tube.
- Add **20 µl VIBE Protease** and **30 µl Carrier RNA**.
- Add **400 µl** sputum sample to the tube and invert to mix. (See specific protocol details.)

Lysis

- Bead beat for **5 minutes**.
- Incubate in dry heat block set to **65°C for 15 minutes (mixing every 5 minutes)** and pulse centrifuge to eliminate foam.

Bind

- Add **400 µl** of **Buffer 1B** and invert to mix.
- Load spin filter with mixture using small transfer pipet three times. Centrifuge each load 2 minutes and pour off flow-through between loads. After the final load, transfer spin filter to new receiver tube.

Wash

- Fill a small transfer pipet with **Buffer 1C** and add it to the spin filter.
- Centrifuge for 2 minutes and pour off flow-through.
- Fill a small transfer pipet with **Buffer 2** and add it to the spin filter.
- Centrifuge for 2 minutes and move spin filter to a new Receiver tube.
- Centrifuge for 3 minutes and move spin filter to a new Receiver tube.
- Incubate uncapped tube for 5 minutes in a dry heat block at **88-95°C**.

Elute

- Using a Pipettor, add **200 µl** of **Buffer 3** to the spin filter.
- Let sit for 2 minutes, then centrifuge for 2 minutes.

Re-Elute

- Using a pipettor, pipet the spin-through liquid back onto the small spin filter.
- Let sit for 2 minutes, then centrifuge for 2 minutes.

Keep receiver tube containing purified sample and test as soon as possible.