



**L812**

Keep refrigerated

Strip card design is the subject of a pending patent application.

**Safety information**

Slightly hazardous (irritant, sensitizer) in case of skin and/or eye contact, always wear gloves and safety glasses.

**Description:**

LyseNow® Strip Cards are plastic strips, each hosts eight 5 mm proprietary chemicals treated filter paper discs. Fluid sample up to 10uL is loaded on each disc and dried, discs are easily detached with pipette tips, DNA/RNA can then be easily eluted from filter paper disc in plate well.

**Kit contents**

item	description	quantity
LyseNow® Strip Card	Individually packaged in zip bag	12

**Protocol**

**1. Sample application on card**

- 1) **Pure DNA/RNA (for archiving)**
  - Up to 10uL is directly applied on each disc.
- 2) **Cells or bacteria cultures:**
  - (For adherent cells only) Detach cells and inactivate trypsin;
  - Cells pelleted and resuspended in 1XPBS;
  - Up to 10uL is applied on each disc.
- 3) **Blood, serum, saliva, nasal fluids, environmental water samples**
  - Up to 10uL is directly applied on each disc.
- 4) **Food Sample enrichment**
  - Follow the appropriate protocols to enrich food pathogens.
  - Up to 10uL is directly applied on each disc.

**2. Card drying**

- 1) Fold back absorption pad along perforated line to fully expose the discs in air;
- 2) Stand the card on a 95 °C dry heating block for 10 min.

**3. Disc translocation**

Push out discs into underneath plate wells using sterile pipette tips, ideally with a multi channel pipette.

1

2

3

❖ See back for continue

4

**4. RNA recovery**

**1) Clean Sample RNA (oral/nasal fluid, serum, etc)**

- Submerge each disc in 100uL nuclease-free water\*,
  - ❖ Use 5% Chelex 100 for better RNA recovery
- Seal the plate;
- vortex at top speed on a vortex 3 times, each for 5 sec; or on a plate shaker for 2 min;
- Spin the plate at top speed for 1 min;
- Transfer the supernatant containing recovered RNA to a new plate.

**2) Tough Sample RNA (blood, feces, soil, etc)**

- Submerge each disc in 200uL Trizol, or phenol:chloroform, or lysis buffer from RNA purification kits;
- Seal the plate;
- vortex at top speed on a vortex 3 times, each for 5 sec; or on a plate shaker for 2 min;
- Spin the plate at top speed for 1 min;
- Aspirate and transfer the supernatant to a new plate
- Follow the protocol of selected RNA purification method to further purify RNA.

**5. DNA recovery**

**1) Clean Sample DNA (oral/nasal fluid, serum, etc)**

- Submerge each disc in 100uL nuclease-free water;
- Seal the plate;
- heat to 95C for 30 min
- Spin the plate at top speed for 1 min;
- Transfer the supernatant containing recovered DNA to a new plate.

**2) Tough Sample DNA (blood, feces, soil, etc)**

- Submerge each disc in 200uL nuclease-free water;
- Seal the plate;
- vortex at top speed on a vortex 3 times, each for 5 sec; or on a plate shaker for 2 min;
- Spin the plate at top speed for 1 min;
- Discard the supernatant;
- Add 100uL of nuclease-free water to each well;
- Seal the plate;
- Heat the tube in a 95 °C for 30 min;
- Spin the plate at top speed for 1 min;
- Transfer the supernatant containing recovered DNA to a new eppendorf tube.

For **high throughput** card elution, we recommend the use of KingFisher™ systems from Thermo. Even though no magnetic beads are involved in the card elution, the system can achieve efficient wash and elution with agitation by the tip sleeves. It can also heat up to 95C.

5

6