

Intended Purpose:

Simultaneous isolation of viral, bacterial, and human DNA and RNA from clinical samples.

Sample Types:

- Blood plasma
- Saliva
- Swabs (nasopharyngeal, buccal, urogenital)
- Urine

Suitable for Real-Time PCR and RT-PCR.

Kit contains reagents for 100 extractions.

Target Group and Scope:

The kit is intended solely for *in vitro* use by trained personnel in accordance with GLP (Good Laboratory Practice) guidelines.

Designed for the simultaneous isolation of viral, bacterial, and human DNA and RNA from clinical samples.

The Principle:

Prime DNA/RNA Extraction kit is based on guanidine thiocyanate lysis followed by alcohol precipitation.

Performance:

Expected DNA / RNA yield varies depending on sample type and quantity.

Extraction efficiency is not less than 80 %.

Low DNA Yield

- Sample volume too high → follow recommended limits.
- Sample old/degraded → store correctly, use fresh samples.
- Incomplete lysis → warm lysis buffer, fully dissolve precipitate.
- Pellet not fully dissolved → avoid overdrying.

Inhibition of downstream analyses

- Residual wash buffer in DNA / RNA → remove completely, dry correctly.

DNA / RNA degradation

- Repeated freeze–thaw cycles → avoid, use fresh preparations.

- Incorrect storage → follow instructions.

Test Procedure:

1. Sample preparation:

- Preheat heating block to + 65 °C and check lysis buffer for precipitation
- Sample addition
- Lysis (10 min at + 65 °C)
- Precipitation (5 min at 13,000 rpm)
- Washing (3 min at 13,000 rpm + 3–5 min drying at + 65 °C)
- Elution (5 min at + 65 °C, then 1 min at 13,000 rpm)
- Storage (vortex and centrifuge 1 min before reuse).

Safety Information:

Hazard Statements



Lysis buffer (LB), precipitation solution (PS), wash solution (WS)



Precipitation solution (PS) and wash solution (WS)

Shelf Life and Storage:

- Shelf life: 12 months.
- Kit expiry date: on outer box.
- Component expiry dates: on individual labels.

Storage:

- Store in original packaging at + 2 to + 25 °C.
- Keep dry and protected from direct sunlight.
- Keep away from incompatible substances.
- Store in a cool, well-ventilated area.

For more information, please refer to the Instructions for Use (IFU) and Safety Data Sheets (MSDS)