

Urine Conditioning Buffer™



Catalog No : D3061-1-8
 D3061-1-140
Storage : Room Temperature

Features

- ✓ Effectively preserves DNA and RNA in urine at ambient temperatures
- ✓ Facilitates pelleting of both cellular and cell-free nucleic acids from large volume urine samples
- ✓ Inhibits microbial growth during long-term (cold-free) storage of urine samples

Description

Urine Conditioning Buffer™ (UCB™) ensures nucleic acid stability in urine during sample storage/transport at ambient temperatures. There is no need for refrigeration or specialized equipment. UCB™ can be filled into any urine collection device.

Instruction for Sample Storage

In an appropriate collection device, add UCB™ according to the instruction below and homogenize:

Urine Volume	UCB™ v volume
1 ml	70 µl

Note:
 After adding UCB™, the cellular and cell-free urine fractions cannot be separated. If required, separate the cellular and cell-free urine fraction after collection centrifuging urine at 3000 x g for 15 minutes. Transfer cell-free fraction to a new tube and add UCB™ to preserve just the cell-free fraction.

Store and/or transport urine samples with UCB™ for later purification of high-quality DNA and/or RNA.

Temperature	Time
25 °C (ambient)	Up to 30 days

DNA/RNA Purification

Upon nucleic acid purification, mix urine thoroughly, and centrifuge urine at at 3000 x g for 15 minutes to form a urine pellet. Purify urine nucleic acid directly with Zymo's DNA or RNA purification kits.

	Product	Size	Cat. No.
DNA	Quick- DNA™ Urine kit	50 preps	D3061
RNA	Quick- RNA™ Miniprep Plus	50 preps 200 preps	R1057 R1058

Urine pelleted utilizing UCB™ can also be processed with other commercially available DNA and RNA purification kits.

Trademarks and Disclaimers
 ™ Trademarks of Zymo Research Corporation. This product is for research use only and should only be used by trained professionals. It is not intended for use in diagnostic applications. Wear protective gloves and eye protection. Follow the safety guidelines and rules enacted by your research institution or facility.

Superior Nucleic Acid Preservation

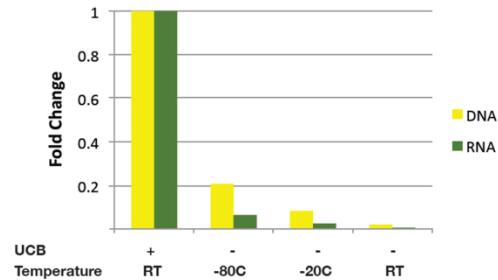


Figure 1. UCB™ provides superior preservation vs. conventional methods. Urine (with or without UCB™) was preserved using different storage conditions: Room Temperature (RT), -20°C, and -80°C. HeLa cells were spiked in to urine before starting the RNA experiment. After two weeks of storage, total DNA (yellow) and total RNA (green) were purified. Corresponding fold change of preserved nucleic acids was obtained from qPCR analysis. Experiment was performed in technical duplicates.

UCB preserves DNA in Increased Temperature

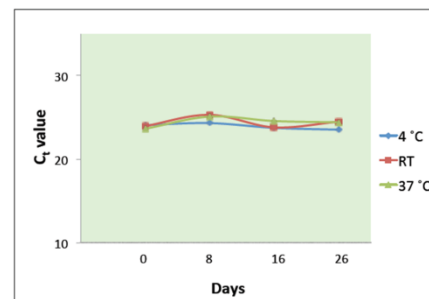


Figure 2. UCB™ preserves DNA in urine stored at different temperatures. Urine added with UCB™ was stored at different temperatures (4 °C, Room Temperature (RT), and 37 °C) and analyzed over a period of 26 days. At each time point, total DNA was isolated from samples using the Quick-DNA™ Urine Kit. Corresponding C_t values were obtained from qPCR analysis. Experiment was performed in technical duplicates.

UCB Prevents Microbial Growth

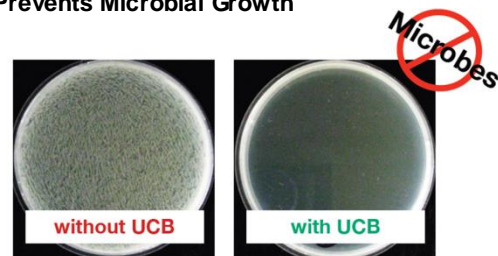


Figure 5. UCB™ prevents microbial growth at ambient temperature. Urine was stored with and without UCB for 6 days. On day 6, microbial colony formation was determined by plating 500 µl urine on LB agar, followed by incubation at 37 °C overnight.

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