PCR*opsis*™ UrineA

(NOT FOR RESALE) v.20230206

INTENDED USE (research use only)
PCR*opsis*™ UrineA is intended to improve the functionality of Reagent 123 when processing urine samples.

PRINCIPLES OF THE PROCEDURE
PCR*opsis*™ UrineA is engineered to improve the accessibility of specimen RNA / DNA from select samples, such as urine, and thereby improve nucleic acid extraction. This buffer uses a mixture of salts, peptides, and proteins to improve access of sample components.

WARNINGS & PRECAUTIONS
For Research Use Only.
- Observe approved biohazard precautions and aseptic techniques to prevent contamination of the product.
- Directions should be read and followed carefully.
- Do not re-pack.
- Do not ingest.

Storage: This product is ready for use and no further preparation is necessary. The product should be transported and stored in its original container at 4–25˚C until used. Do not overheat. Do not incubate or freeze prior to use. Improper storage will result in a loss of efficacy. Do not use after expiration date, which is printed on the label.

Product Deterioration: PCR*opsis*™ UrineA should not be used if (1) there is evidence of damage or contamination to the product, (2) there is evidence of leakage, (3) the color of the reagent has changed from yellowish-clear, (4) the expiration date has passed, or (5) there are other signs of deterioration.

PROCEDURES
Materials Provided: PCR*opsis*™ UrineA

Materials Required But Not Provided: PCR*opsis*™ Reagent 123 (see product IFU), PCR*opsis*™ Lysis Beads (see product IFU), heating device (heating block or thermal cycler), thin walled tube (0.2 ~ 0.6 mL) or 96-well PCR plate, plate sealer, pipette tips and test sample

1. Centrifuge 10 mL (1.5~25 mL) of urine at >1,400xg for 10 minutes in a 15 mL or 50 mL conical
    1. Higher volumes of centrifuged urine is expected to result in better results

2. Remove supernatant and leave <250 µL of residual urine

3. Resuspend cell pellet using residual urine

Recommended when working with bacteria, yeast / fungi, and spores:

1. Add 200 µL of sample to a vial or well containing roughly 0.25 grams PCR*opsis*™ Lysis Beads (see product IFU)
2. Cap tube or place a plate sealer on the deep well plate
3. Vortex on high for ~5 minutes to lyse microorganisms

4. Thoroughly mix 2 µL of PCR*opsis*™ UrineA with 1 mL PCR*opsis*™ Reagent 123 (called **123-UrineA solution** from here on)
    1. This mixture is stable for ~24 hours at room temperature

5. Mix 20 µL 123-UrineA solution with 20 µL of the resuspended urine pellet in a thin-walled tube (0.2 ~ 0.6 mL)
    1. **For optimal results, the reagent needs to be added first to the tube before the sample is added.**
    2. Ratio of sample to PCR*opsis*™ reagent will remain 1:1, but volume can be increased if needed (example: 30 µl : 30 µl and so forth)

6. Pipette up & down to ensure complete mixing and then cap tube or apply plate sealer to plate to prevent evaporation

7. Heat diluted sample at 95˚C for ~15 minutes and let cool at room temperature for ~10 seconds before continuing
    1. Heating for a longer period of time may improve the nucleic acid extraction efficiency
    2. Make sure the heating device has reached the desired temperature before applying sample.
    3. You may need to increase the heating time if increasing the volume of sample and reagent past 100 µl of each
    4. Sample heating can be performed using a controlled heating block or thermal cycler; however a device lid is highly recommended to minimize popping of tube caps or unpeeling of the plate sealer

8. Mix heated sample and use lysed / stabilized sample in your desired downstream applications

AVAILABILITY – NOT FOR RESALE

Cat. #	Description
8780250	PCR*opsis*™ UrineA, 0.25 mL
8781000	PCR*opsis*™ UrineA, 1 mL

MANUFACTURER

Entopsis, Inc., 7600 NW 69th Ave, Medley, FL 33166, USA info@entopsis.com

Glossary of Symbols Used

RUO	Research use only		Storage temperature
REF	Manufacturer's catalog number	STERILE A	Sterile through aseptic techniques
LOT	Lot number		Manufacturer
	Expiration date (year/month)		