

## شرکت تحقیقاتی تولیدی پویا ژن آزما (POUYA GENE AZMA Ltd. (PGA

# PGA Tissue and cell culture DNA Extraction KIT

Catalog No. PD130-050

50 Preps

Store at: RT

### For research use only

## **KIT CONTENTS:**

Buffer MI	10 ml
Buffer MII	3 ml
Buffer MIII	5 ml
Solvent Buffer	3 ml
Proteinase K	100 µl
RNase A	35 µl

scan for more



Required contents: Cold ethanol %100 Cold ethanol %70

#### KIT Description:

The PGA Tissue and Cell culture DNA Extraction KIT contains all the ingredients for quick preparation of genomic, mitochondrial, or viral DNA from cell cultures or animal tissues. The high-quality extracted DNA procedure is ready to use in molecular biology procedures (PCR, restriction digestion, cloning, Southern blot, DNA sequencing, etc.). The KIT is safe and user-friendly with no need for phenol and chloroform.

## **LABORATORY PROTOCOL:**

Attention: Please add RNase A to MI Buffer before use and keep at 4 °C.

#### Before start:

- -Set a water bath at 55 ℃
- -Preparation of "Ready to use" MI buffer: Mix 200  $\mu$ l MI buffer (pre-mixed with RNase) with 2  $\mu$ l Proteinase K per sample. Scale up the volume for multiple samples.

Tissue and cell culture dissociation

- For Tissue dissociation: Transfer 10-20 ng of tissue to a 1.5 ml microtube, use micropestle to grind several times.
- For cell dissociation: Transfer 200-500 µl of pop smear suspension or 3-5 × 10 <sup>6</sup> cell culture to a 1.5 ml microtube, centrifuge 5 minutes at maximum speed. Remove the supernatant and keep the precipitate.
- 1. Add 200  $\mu$ l "Ready to use" MI buffer to resuspend the precipitate or the tissue sample. Mix thoroughly and incubate at 55  $^{\circ}$ C for 30-50 minutes (mix occasionally to aid digestion).
- 2. Add 50 µl MII buffer to the tube and gently invert

- 2 times. Keep it at room temperature for 5-10 minutes until a clear solution is produced.
- 3. Add 1  $\mu$ l of RNase A to the lysate, mix by pipetting 5 times or until a homogenous solution is obtained. Incubate at RT for 5 minutes.
- 4. Add 100 µl MIII buffer to the tube and invert 10 times. (When MIII buffer is added, the white precipitate is produced).
- 5. Microfuge at 13000 rpm for 10 minutes.
- 6. Transfer the supernatant to a new tube. (Important: Do not transfer the precipitate to the new tube. In this case, repeat steps 5 and 6.)
- 7. Add 2 volumes of solution, cold ethanol 96%-100% to the solution and invert 5 times. Microfuge at 13000 rpm for 5 minutes.
- 8. Pour off ethanol and wash the precipitate by adding 400  $\mu l$  cold ethanol %70 and invert 2-3 times.
- 9. Microfuge at 13000 rpm for 2-3 minute.
- 10. Pour off the ethanol completely and dry the pellet for 2-3 minutes at room temperature.
- 11. According to the precipitate, add 20-50  $\mu$ l Solvent Buffer. The precipitate must be solved completely.

نشانی: تهران میدان شهر زیبا، انتهای خیابان شهید احمد کاشانی، کنار گذر غرب به شرق بزرگراه شهید همت بعد از پل کن، خیابان پردیس، مجتمع نفاوری همت، طبقه اول واحد ۱۴- وب سایت: www.pgazma.com پست الکترونیکی : pouyagene@gmail.com تلفن۴۴۴۳۶۷۶