

# TGuide FFPE DNA One-Step Kit

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This product is for scientific research use only. Do not use in medicine, clinical treatment, food or cosmetics.

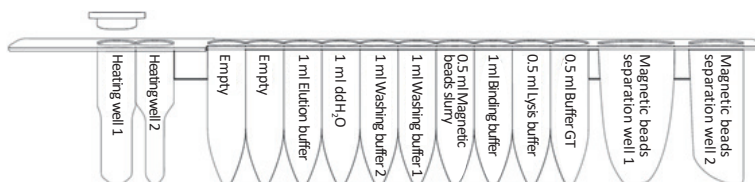
# TGuide FFPE DNA One-Step Kit

Cat. no. OSR-M405

## Kit Contents

Contents	OSR-M405 (48 rxn)
Prepacked Reagent Cartridge(405)	48
Pipette Tips/Tip Caps	96
1.5 ml Centrifuge Tubes	50
Proteinase K	1 ml
Sula Oil	25 ml
ThermoStable Cap	48
Handbook	1

## Reagent Cartridge:



## Storage Conditions:

This kit can be stored at room temperature (15-30°C) under dry condition for 12 months.

## Product Description:

The TGuide FFPE DNA One-Step Kit is specifically designed to extract genomic DNA from formalin-fixed, paraffin-embedded tissue samples in conjunction with TGuide M16 Automated Nucleic Acid Extractor. The kit adopts a one-step heating method to simultaneously perform paraffin dissolution and tissue lysis, and does not contain harmful reagents such as xylene. There are two extraction options for this kit: For small amount samples, the lysis time is 2 hours; for large amount samples, it is recommended to lyse the samples overnight for 16 hours. This kit utilizes cellulose-embedded magnetic beads technology to efficiently extract genomic DNA.

The genomic DNA extracted by this kit can be directly used for various routine operations without further purification, including enzyme digestion, PCR, library construction and Southern blot, etc.

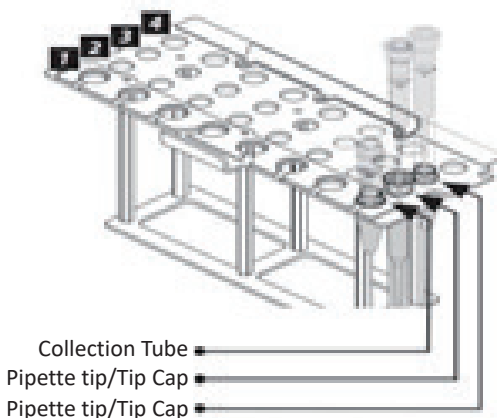
## Important Notes:

1. 1-5 rolls of the FFPE samples with the roll thickness less than 5  $\mu\text{m}$  can be extracted by this kit. For the samples with the surface area larger than 300  $\text{mm}^2$ , please equally cut the sample into 4 pieces.
2. For the first time applied samples, it is recommended to use no more than 1 roll of the sample amount, and cut the sample before extracting.
3. Sula Oil is a deparaffinization buffer. 20 mg paraffin can be dissolved in 500  $\mu\text{l}$  Sula Oil.

## Features:

1. **Deparaffinization in the machine:** The deparaffinization and extraction can be automatically completed by putting the untreated FFPE samples in to the reagent cartridge and add in Sula Oil and proteinase K, without the need for manually deparaffinizing.
2. **Reliable results:** The extracted genomic DNA is free from the contamination of RNA or proteins, and can be directly used for PCR or qPCR applications.
3. **Safe and non-toxic:** No organic solvents such as phenol and chloroform which are harmful to the human body are needed for the operation.

## The Setting of the T-rack:



### Note: Read these precautions before using this kit.

This product must be used in conjunction with the TGuide M16 Automated Nucleic Acid Extractor.

### Protocol:

1. Prepare the FFPE samples as recommended in the Important Notes.
2. Add 500  $\mu$ l Sula Oil, 20  $\mu$ l proteinase K and the prepared FFPE samples to the bottom of heating well 1, and tighten the ThermoStable Cap.

**Note: If the FFPE sample size is too large (>300 mm<sup>2</sup>), cut the sample evenly into 4 pieces (see Important Notes). Please make sure to add the sample to the bottom of the heating well 1 to prevent the sample from getting stuck on the ThermoStable Cap.**

3. Place the collection tube in the well labeled "1" of the T-rack, and place the pipette tips and the tip cap in the wells labeled "2" and "3". Run the cartridge code 405 program (FFPE DNA extraction), set the deparaffinization time (2 h or 16 h), and select the final elution volume.

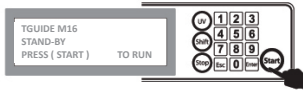
**Note: If higher yield is required, it is recommended to use the 16 h deparaffinization time. However, the long-time treatment might cause DNA degradation.**

## Start program

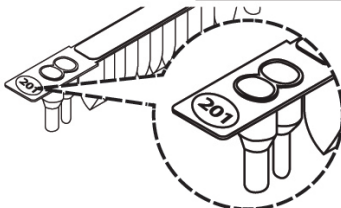
## TGuide M16

Apply your specimen to TGuide after installing all necessary accessories.

Press START



After the Start button is pressed, the machine executes the calibration procedure, initializes, and moves all axes to the original position.



Enter the cartridge code and execute the program. The cartridge code is displayed on the prepacked reagent cartridge and the cover of the manual.

**!** The above code is for demonstration purposes, please refer to the reagent cartridge you will actually purchase.



Confirm the cartridge code you entered again and press Enter to select the sample volume on the next page.



Select the sample volume



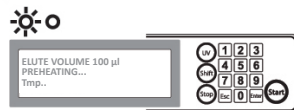
Confirm the sample volume. Press Enter to enter the next page; Press ESC to return to the Stand-By page.



In this step, check whether the cartridge rack and T-rack are in the work area. Then press Enter to select the elution volume on the next page.



Select elution volume



In this process, the green LCD indicator lights up and the heater starts to heat up to 65°C for the lysis step. The TGuide M16 light is on at all times during the TGuide M16 program.

Don't open the door at this time, it will cause an emergency stop. You may lose your sample due to machine interruption.



When the program is completed, an alarm sound can be heard and the green LCD indicator goes out.