

# MagCore® Nucleic Acid Extraction Kits



## For Automated Extraction of Genomic DNA from Formalin-fixed Paraffin-embedded (FFPE) Tissue

MagCore® Genomic DNA FFPE One-Step Kit is designed to purify total DNA (including genomic, mitochondrial, and viral DNA) from Formalin-fixed Paraffin-embedded tissues via MagCore® Automated Extraction instruments. Our program features One-Step Heating, which automatically melts paraffin and lyses cells at the same time. No harmful reagent such as xylene is involved in the deparaffination process. Two protocols are outlined for different tissues sizes: 2-hour setup for smaller tissues and 16-hour setup for larger tissues.

# 405

### 405 MagCore® Genomic DNA FFPE One-Step Kit

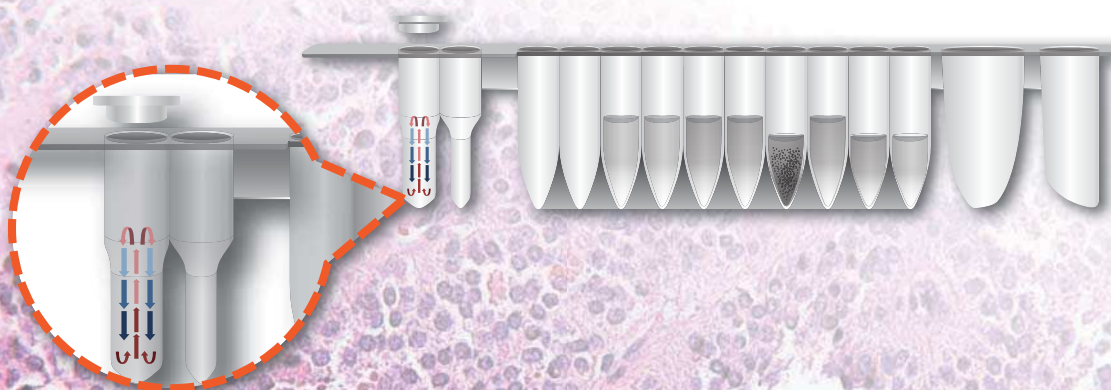


### Features

1. Can load FFPE tissue samples with a surface area of up to 300 mm<sup>2</sup> and up to 5 µm thick.
2. A full package for DNA to be purified from FFPE samples. Complete automatic procedure from deparaffination to elution.
3. Stable deparaffination by Sula oil and reproducible results; no xylene involved.
4. Thermostable cap is specially designed to cover the reaction well for an optimal condition where the lysis buffer and the FFPE sample can mix properly during the processing period.

### Applications

1. PCR and real-time quantitative PCR
2. Southern Blot
3. Next Generation Sequencing
4. Genotyping



## Performance

### 2-hr heating protocol works out

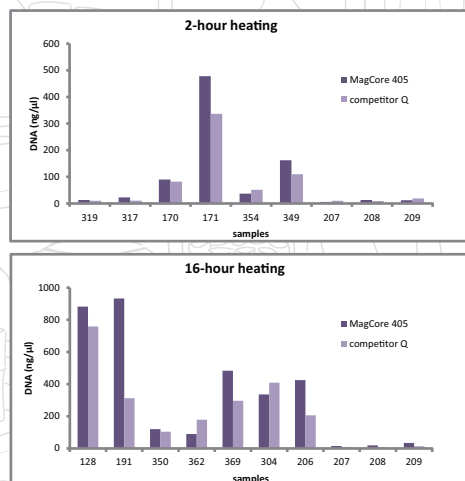
There are 2-hour heating and 16-hour heating protocols. It is suggested for a better performance that the 2-hour heating program is for small tissues and the 16-hour program is for large tissues.

### Genomic DNA with high performance

The DNA extracted by MagCore® Genomic DNA FFPE One-Step Kit is high yield and suitable for downstream PCR and real-time PCR.

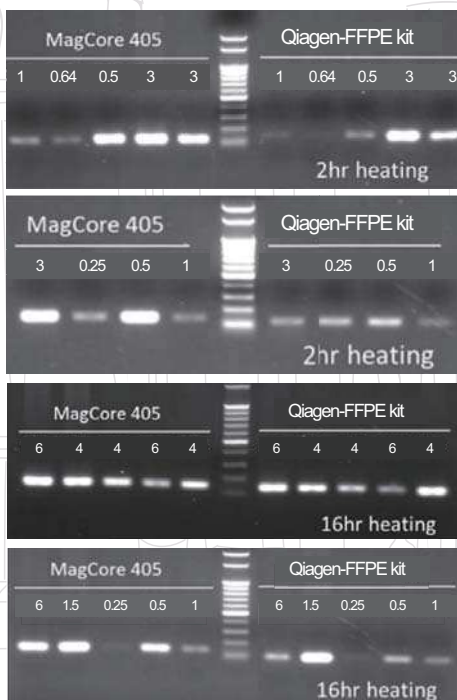
#### A. DNA concentration

Whether samples were treated with either a 2-hour or 16-hour heating, yields of DNA extracted by MagCore® are mostly higher than the yields of DNA extracted by the competitor.



#### B. The downstream PCR

PCR products of DNA purified by MagCore® and the competitor brand are confirmed by 1.5% agarose gel electrophoresis.

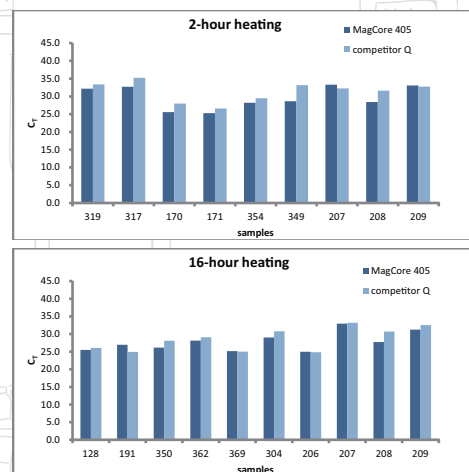


DNA yield gained from 10 mg of mice tissue samples and 0.25 cm tail

Sample ID	Yield (ng/ul)
Liver	17.5
Spleen	17.5
Brain	10
Lung	12.5
Kidney	32.5
Tail	7.5

#### C. Purified DNA ideal for the downstream real-time PCR

Whether samples experience a 2-hour or 16-hour heating, the CT values of samples processed by MagCore® are mostly lower than the CT values of samples processed by the competitor.



#### D. Tissue sample sizes

It is shown below that different sizes of tissue samples were processed by a 2-hour or 16-hour heating program.

2-hour heating			16-hour heating		
Sample	Size (cm <sup>2</sup> )		Sample	Size (cm <sup>2</sup> )	
1	319	1*1	1	128	2*3
2	317	0.8*0.8	2	191	2*2
3	170	0.5*1	3	350	2*2
4	171	1.5*1	4	362	2*3
5	354	1.5*2	5	369	2*2
6	349	1.5*2	6	304	2*3
7	207	0.5*0.5	7	206	1.5*1
8	208	0.5*1	8	207	0.5*0.5
9	209	0.5*1	9	208	0.5*1
			10	209	1*1

## MagCore® Automated Nucleic Acid Kits Specification

MagCore® Super/HF16 Plus/Plus II				MagCore® HF16 /Compact/HF48			
Cartridge Code	Cat No.	Cat No.	Cat No.	Running Time	Cat No.	Cat No.	Cat No.
	36 preps	72 preps	96 preps		36 preps	72 preps	96 preps
<b>405</b> MagCore® Genomic DNA FFPE One-Step Kit							
For FFPE tissue samples.							
Contents: Thermostable Cap, Sula Oil, Pre-Filled Cartridges, Filter Column Sets, GT Buffer, Proteinase K, PK Storage Buffer, Disposable Tip & Holder Sets, Sample Tubes, Elution Tubes							
Shelf life: 18 months							
MGF-01		MGF-03	33min (sample volume: 400ul)	MGF-01		MGF-03	175 min (2-hour heating) - Standard 1012 min (16-hour heating) - High Yield

## Enzyme Selection Guide

Product	Contents	Cat No.
Proteinase K Set	11 mg Proteinase K, 1.25 ml PK Storage Buffer	PK011
RNase A	50 µl RNase A (50mg/ml)	RN050
	130 µl RNase A (50mg/ml)	RN130



FDA (10055336) registered and CE-IVD certified (Instruments & Reagents)  
Manufactured in accordance with quality system requirements that comply with ISO 13485 standards and QSR

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