

Automated Nucleic Acid Extraction System
SpinPrep96 자동 핵산추출 시스템



SPINPREP

Introducing SpinPrep 96



7인치 LCD 터치스크린

직관적인 메뉴 구성
샘플 유형에 맞는 최적화 프로토콜

HEPA Filter 및 UV Lamp

배기가스 발생 위험 제거
샘플 오염을 사전에 방지

마그네틱 로드를 이용한 비드 전달 방식

Rotary mixing technology
비용 절감, 빠른 추출 속도

Heat Block 장착

Lysis/elution 과정에서 heating
고수율 및 고순도 핵산 추출 보장

Automated Hatch

모터 구동식 자동 개폐
잠재적인 생물학적 위험으로부터 보호

SpinPrep 96 Run WorkFlow



Sample loading



Load plates



Select program



Press start



13~40min

Run time

Magnetic Rotary Mixing Technology를 이용한 핵산 추출의 원리

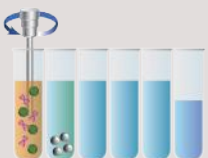
기본적으로 음전하를 띠는 핵산(DNA 및 RNA)을 반대 전하(+)로 코팅한 magnetic beads로 흡착시킨 후 이를 magnetic rods의 자기력을 이용하여 deepwell plate의 각 컬럼 별로 옮겨줍니다. 여기에 전용 시약과 버퍼를 사용하여 각 시료의 특성에 맞게 lysis, washing, elution 등 일련의 과정을 순차적으로 일어나게 하여 핵산을 추출합니다.

일반적인 oscillatory mixing 보다 진일보한 rotary mixing 기술은 360°로 회전하면서 혼합함으로써 정제 과정에서 발생하는 에어로졸을 최소화 하고 교차 오염의 위험을 낮추는 동시에 실험 결과의 정확도(>98%)도 유지할 수 있습니다.

● Impurities ● Bead ● DNA

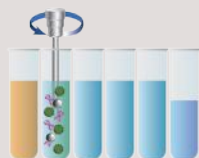
Step 1

Mix sample with Lysis Buffer



Step 2

Magnetic adsorption by beads



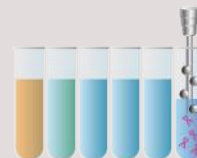
Step 3

Washing×3



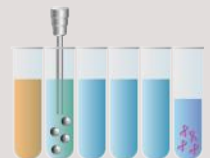
Step 4

Elute DNA



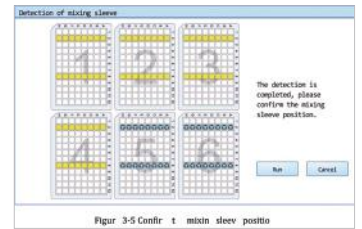
Step 5

Release beads



맞춤형 프로토콜

Touch screen 화면을 사용하여 사용자가 쉽게 프로토콜을 수정 및 저장할 수 있고, 모든 프로토콜을 USB로 쉽게 업로드 할 수 있습니다.



Figur 3-5 Confir t mixin sleeve positio

Heating Blocks

Lysis 및 elution 과정에서 샘플을 25°C~120°C까지 가열하여 높은 수율 및 순도의 핵산을 추출 할 수 있습니다.



UV 살균 및 HEFA Filter

UV 램프를 통해 오염을 제거하고, HEPA filter는 외부의 공기 유입을 막아 오염을 방지합니다.



HiQ 추출 시약 Type

96-well (16test, 8test)과 single tube (1test)의 다양한 형태의 시약이 제공됩니다.



Deep well type: 16test



Deep well type: 8test



Single 6-tube type : 1-8test

다양한 액세서리 제공

- LED magnetic base: – capture remaining magnetic beads
- Sample 이동 tray



자동핵산추출장비 선택 가이드

Full Automation Nucleic Acid Extraction System All-in-One System



Spinprep 96



SpinPrep 16



Nanoprep 32



NanoPrep 192



Panall8000

Throughputs				
한 회당 1개 ~ 최대 96개	한 회당 1개 ~ 최대 16개	한 회당 1개 ~ 최대 32개	한 회당 1개 ~ 최대 192개	한 회당 1개 ~ 최대 8개
Processing Volume				
30~1,000 μ l	20~1,700 μ l	30~1,000 μ l	30~1,000 μ l	10~250 μ l
Collection Efficiency				
$\geq 98\%$	$\geq 98\%$	$> 95\%$	$> 95\%$	$> 95\%$
Mixing Method				
Rotation	Rotary mixing	Oscillation	Vertical mixing	Vertical mixing
Rotational Speed				
$\leq 3,000$ rpm	100~3,000rpm	-	-	-
Display				
7 인치 터치스크린	6.86 인치 터치스크린	3.5 인치 터치스크린	7 인치 터치스크린	12.1 인치 터치스크린
Pollution Control				
HEPA filter & UV light	HEPA filter & UV light	UV light	HEPA filter & UV light	HEPA filter & UV light
Dimension (LWH)				
490×510×480mm	210×229×242mm	440×435×445mm	710×535×515mm	750×350×580mm
Weight				
45kg	7.4Kg	31.5kg	55kg	75kg
Features				
	Module networking (~192)			1~8개의 샘플 튜브 자동 Capping/Decapping ▶ 샘플분주 ▶ 핵산추출 ▶ PCR setup ▶ PCR분석

HiQ Nucleic Acid Extraction Kit

Rapid Extraction

- HiQ nucleic acid extraction kit 를 사용하면 대용량의 샘플을 (최소 1개~96개) 간단하고 빠르게 추출할 수 있어 시간 절감이 가능합니다.

Easy Operation and More Convenient

- 추출에 필요한 모든 solution은 (lysis, bead, wash, elution buffer) 추출 플레이트에 pre-filled 된 형태로 제공되며 별도의 유기용 시약이 필요하지 않습니다.
- 샘플 종류에 따라 별도의 proteinase K 첨가 없이 핵산추출이 가능합니다.



High Precision and Efficiency

- 95% 이상의 추출 정확도를 보입니다. (CV <5%)
- 50 copy/ml 이상의 바이러스 DNA/RNA 핵산 추출을 보장합니다.



High Quality Magnetic Bead

- 고품질의 magnetic bead를 사용하여 고효율, 고수율의 샘플 추출이 가능합니다.
- 모양과 크기가 동일한 bead는 실험의 재현성을 높여주고, 매끄럽고 균일한 bead 표면으로 불필요한 캡처를 방지합니다.

Flexible Options

- 다양한 요구사항에 맞게 추가 구성 가능합니다.
- 샘플유형에 따라 customized protocol을 제공합니다.

Various Specimen

- HiQ nucleic acid extraction kit 시리즈는 샘플 추출 및 정제를 위한 최적의 솔루션을 제공합니다.
- 인체, 동물, 식물, 미생물 등 다양한 샘플에 적용이 가능합니다.

Application Areas

- Animal health
- Clinical Diagnostics
- Genomics research
- Food safety
- Forensic identification



HiQ Viral DNA/RNA Kit v3.0

Sample WorkFlow

Sample collection



Compatible with multiple sample types

Sample purification



HiQ kit with SpinPrep96 instrument

Analysis



Compatible with multiple downstream applications

- Viral/Pathogen
- qPCR
- Sequencing
- NGS

Contents of the Comparison	HiQ Viral DNA/RNA Kit v3.0
Extraction Range	DNA virus, RNA virus
샘플 형태	Whole blood, serum, plasma, urine, swab and other liquid samples
샘플 Volume	100µl - 400µl
Detection Limit	≥50 copies
Pack Size	#P0053 / Deep well type, 96T (16test × 6plate)
	#P0054 / Deep well type, 48T (8test × 6plate)
	#P0055 / Single tube, 96T (1T × 96tube)

HiQ Viral DNA/RNA Kit v4.0

Sample WorkFlow

Sample collection



Compatible with multiple sample types

Sample purification



HiQ kit with SpinPrep96 instrument

Analysis



Compatible with multiple downstream applications

- Viral/Pathogen
- qPCR
- Sequencing
- NGS

Contents of the Comparison	HiQ Viral DNA/RNA Kit v4.0
Extraction Range	DNA virus, RNA virus
샘플 형태	Whole blood, serum, plasma, urine, swab and other liquid samples
샘플 Volume	300µl
Detection Limit	≥50 copies
Pack Size	#P0077 / Deep well type, 96T (16test × 6plate)
	#P0078 / Deep well type, 48T (8test × 6plate)
	#P0079 / Single tube, 96T (1T × 96tube)

HiQ Whold Blood Viral DNA/RNA Kit

Sample WorkFlow

Sample collection



Compatible with multiple sample types

Sample purification



HiQ kit with SpinPrep96 instrument

Analysis



Compatible with multiple downstream applications

- Viral/Pathogen
- qPCR
- Sequencing
- NGS

Contents of the Comparison	HiQ Whold Blood Viral DNA/RNA Kit
Extraction Range	DNA virus, RNA virus
샘플 형태	Whole blood
샘플 Volume	300µl
Detection Limit	≥50 copies
Pack Size	#P0080 / Deep well type, 64T (16test × 4plate)
	#P0081 / Deep well type, 32T (8test × 4plate)
	#P0082 / Single tube, 60T (1T × 60tube)

HiQ Whole Blood DNA Kit

Sample WorkFlow

Sample collection



Compatible with multiple sample types

Sample purification



HiQ kit with SpinPrep96 instrument

Analysis



Compatible with multiple downstream applications

- Viral/Pathogen
- qPCR
- Sequencing
- NGS

Contents of the Comparison	HiQ Whole Blood DNA Kit
Extraction Range	Genomic DNA
샘플 형태	Whole blood
샘플 Volume	200µl
Detection Limit	≥50 copies
Pack Size	#P0007 / Deep well type, 64T (16test × 4plate)
	#P0008 / Deep well type, 32T (8test × 4plate)
	#P0048 / Single tube, 60T (1T × 60tube)

HiQ Tissues DNA Kit

Sample WorkFlow

Sample collection



Compatible with multiple sample types

Sample purification



HiQ kit with SpinPrep96 instrument

Analysis



Compatible with multiple downstream applications

- Viral/Pathogen
- qPCR
- Sequencing
- NGS

Contents of the Comparison	HiQ Tissues DNA Kit
Extraction Range	Genomic DNA, viral DNA, viral RNA, bacteria
샘플 형태	Tissue, cell
샘플 Volume	700µl
Detection Limit	≥50 copies
Pack Size	#P0010 / Deep well type, 64T (16test × 4plate)
	#P0011 / Deep well type, 32T (8test × 4plate)
	#P0049 / Single tube, 60T (1T × 60tube)

HiQ Plant DNA Kit

Sample WorkFlow

Sample collection



Compatible with multiple sample types

Sample purification



HiQ kit with SpinPrep96 instrument

Analysis



Compatible with multiple downstream applications

- Viral/Pathogen
- qPCR
- Sequencing
- NGS

Contents of the Comparison	HiQ Plant DNA Kit
Extraction Range	Genomic DNA, bacteria, virus DNA, virus RNA
샘플 형태	Blade, pulp, seed, tuber etc.
샘플 Volume	200µl
Detection Limit	≥50 copies
Pack Size	#P0013 / Deep well type, 64T (16test × 4plate)
	#P0014 / Deep well type, 32T (8test × 4plate)
	#P0050 / Single tube, 60T (1T × 60tube)

HiQ Stool DNA/RNA Kit

Sample WorkFlow

Sample collection



Compatible with multiple sample types

Sample purification



HiQ kit with SpinPrep96 instrument

Analysis



Compatible with multiple downstream applications

- Viral/Pathogen
- qPCR
- Sequencing
- NGS

Contents of the Comparison	HiQ Stool DNA/RNA Kit
Extraction Range	Genomic DNA, bacteria, virus DNA, virus RNA
샘플 형태	Stool, cell, other samples
샘플 Volume	200µl
Detection Limit	≥100 copies
Pack Size	#P0019 / Deep well type, 64T (16test × 4plate)
	#P0020 / Deep well type, 32T (8test × 4plate)
	#P0052 / Single tube, 60T (1T × 60tube)

HiQ Multi Sample Kit

Sample WorkFlow

Sample collection



Compatible with multiple sample types

Sample purification



HiQ kit with SpinPrep96 instrument

Analysis



Compatible with multiple downstream applications

- Viral/Pathogen
- qPCR
- Sequencing
- NGS

Contents of the Comparison	HiQ Multi Sample Kit
Extraction Range	Genomic DNA, genomic DNA, viral DNA, viral RNA, bacteria
샘플 형태	Whole blood, tissue, cell, hair, buccal swab
샘플 Volume	200µl
Detection Limit	≥50 copies
Pack Size	#P0056 / Deep well type, 64T (16tes × 4plate)
	#P0057 / Deep well type, 32T (8test × 4plate)
	#P0058 / Single tube, 60T (1T × 60tube)

HiQ Bacteria Kit

Sample WorkFlow

Sample collection



Compatible with multiple sample types

Sample purification



HiQ kit with SpinPrep96 instrument

Analysis



Compatible with multiple downstream applications

- Viral/Pathogen
- qPCR
- Sequencing
- NGS

Contents of the Comparison	HiQ Bacteria Kit
Extraction Range	Bacteria genomic DNA
샘플 형태	Bacterial suspension cultures, cotton swabs, sputum, urine and stool etc.
샘플 Volume	500µl
Detection Limit	≥50 copies
Pack Size	#P0022 / Deep well type, 64T (16tes × 4plate)
	#P0023 / Deep well type, 32T (8test × 4plate)
	#P0024 / Single tube, 60T (1T × 60tube)

HiQ Total RNA Kit

Sample WorkFlow

Sample collection



Compatible with multiple sample types

Sample purification



HiQ kit with SpinPrep96 instrument

Analysis



Compatible with multiple downstream applications

- Viral/Pathogen
- qPCR
- Sequencing
- NGS

Contents of the Comparison	HiQ Total RNA Kit
Extraction Range	RNA (total RNA, mRNA)
샘플 형태	Liquid samples, tissue, cells
샘플 Volume	200µl
Detection Limit	≥50 copies
Pack Size	#P0032 / Deep well type, 64T (16test × 4plate)
	#P0033 / Deep well type, 32T (8test × 4plate)
	#P0034 / Single tube, 60T (1T × 60tube)

Product Name	Cat. No.	Pack Size
HiQ viral DNA/RNA kit v.1.0	P0069	Deep well type, 96T (16test × 6plate)
	P0070	Deep well type, 48T (8test × 6plate)
	P0071	Single tube type, 96T (1T × 96tube)
HiQ viral DNA/RNA kit v.2.0	P0072	Deep well type, 96T (16test × 6plate)
	P0073	Deep well type, 48T (8test × 6plate)
	P0074	Single tube type, 96T (1T × 96tube)
HiQ viral DNA/RNA kit v.3.0	P0053	Deep well type, 96T (16test × 6plate)
	P0054	Deep well type, 48T (8test × 6plate)
	P0055	Single tube type, 96T (1T × 96tube)
HiQ viral DNA/RNA kit v.4.0	P0077R	Deep well plate 96T (16test × 6plate)
	P0078R	Deep well plate, 48T (8test × 6plate)
	P0079R	Single tube, 96T (1T × 96tube)
HiQ whold blood viral DNA/RNA kit	P0080R	Deep well plate, 64T (16test × 4plate)
	P0081R	Deep well plate, 32T (8test × 4plate)
	P0082R	Single tube, 60T (1T × 60tube)
HiQ whole blood DNA kit	P0007	Deep well type, 64T (16test × 4plate)
	P0008	Deep well type, 32T (8test × 4plate)
	P0048	Single tube type, 60T (1T × 60tube)
HiQ tissues DNA kit	P0010	Deep well type, 64T (16test × 4plate)
	P0011	Deep well type, 32T (8test × 4plate)
	P0049	Single tube type, 60T (1T × 60tube)
HiQ plant DNA kit	P0013	Deep well type, 64T (16test × 4plate)
	P0014	Deep well type, 32T (8test × 4plate)
	P0050	Single tube type, 60T (1T × 60tube)
HiQ stool DNA/RNA kit	P0019	Deep well type, 64T (16test × 4plate)
	P0020	Deep well type, 32T (8test × 4plate)
	P0052	Single tube type, 60T (1T × 60tube)
HiQ multi sample kit	P0056	Deep well type, 64T (16tes × 4plate)
	P0057	Deep well type, 32T (8test × 4plate)
	P0058	Single tube type, 60T (1T × 60tube)
HiQ bacteria kit	P0022	Deep well type, 64T (16tes × 4plate)
	P0023	Deep well type, 32T (8test × 4plate)
	P0024	Single tube type, 60T (1T × 60tube)
HiQ total RNA kit	P0077R	Deep well plate, 64T (16test × 4plate)
	P0078R	Deep well plate, 32T (8test × 4plate)
	P0079R	Single tube, 60T (1T × 60tube)

Consumables

Product Name	Cat. No.	Pack Size
Single kits docking(blue)	P0060	EA
96 deep-well plate	P0061	EA
Rod cover, NanoPrep 32	P0062	20pcs/pk
Rotary strip mixing sleeves, SpinPrep 96	P0063	20pcs/pk
Magnetic LED block	P0064	unit
HEFA filter	P0067	unit

(주)바이오디

(우.14322) 경기도 광명시 하안로 60
광명테크노파크 A동 1101, 1102호

구매문의

T_ 02.6264.3399

F_ 02.6264.3400

E_ 고객_cs@bio-d.co.kr

업체_ds@bio-d.co.kr

www.biod.co.kr