

Specifications	
Product name	GENE PREP STAR Automated DNA isolation system
Model	NA-480 PLUS
Maximum sample / run	Whole Blood 5ml, Oragene 2ml: 30 samples Whole Blood 10ml, Oragene 4ml: 15 samples
Sample input	Primary tube, Oragene tube or Kurabo 5-hole tube (NT-2100S)
DNA output	SBS plate or Kurabo 5-hole tube (NT-2000)
Protocols	Max. 10 protocols
System Components	Centrifuge ..... 6 bucket swing rotor max.3,900rpm (2,500G) Dispenser for reagent line ..... 9 channels, syringe model Robot Unit Working table unit Agitator unit ..... Eccentric rotating vibration Heater unit ..... Far infrared heater HEPA filter Built -in barcode reader Sample Tracking software Primary tube tray ..... for 30 samples Dispenser for sample transfer ..... 3 channels with liquid level detection unit
Electric control	Internal microprocessor
Screen	LCD touch screen panel
Power supply	AC100-230V, 50/60Hz, 1.5KVA *2line (1KVA+0.5KVA)
Dimension	W1,610xD760x1,535(mm)
Sample tracking	FS Sample Tracking software *Mcrisoft Windows7 or 10* PC required
Weight	488kg



Protocols							
Sample Condition	WB 2ml	WB 5ml	WB 10ml	Orangene 2ml	Orangene 4ml	FG	Tissue DNA
Fresh Blood	✓	✓	✓			✓	
Frozen Blood	✓	✓	✓			✓	
Others				✓	✓		✓

Product	Product Description	Specification
KNA-NR-120	Reagent kit for DNA extraction from whole blood	Approximately 300 samples (5ml WB)
KNA-NR-201	Reagent kit for DNA extraction from Animal tissue	Approximately 650 samples
NT-2100S	5-hole tube for Blood sample	Reaction tubes
T-1100	Pipette Tips	Pipette Tips for sample transfer
KNA-99-4800-B	GenePrep STAR 480	1.0 to 10.0mL of sample
KNA-99-480P-B	GenePrep STAR 480 Plus	1.0 to 10.0mL of sample with dispenser

### Contact information

**ADS Biotec Limited**  
40 Watt Road  
Hillington Park  
Glasgow, G52 4RY UK  
Registered in England and Wales

Phone: +44 (0)141 892 8800  
Fax: +44 (0)141 883 5967  
Email: info@adsbiotec.com  
Web: www.adsbiotec.com

### Corporate Office

**ADS BIOTEC Inc.**  
7409 Irvington Road  
Omaha, NE 68122 USA  
Phone: 888-974-7483  
Email: info@adsbiotec.com  
Web: www.adsbiotec.com



# GENE PREP STAR - Automated DNA extraction NA-480 PLUS

Fully automated DNA isolation system from large volume Whole Blood



**+Automated** large volume whole blood DNA extraction from primary tube sample to final DNA storage.

**+High purity,** high molecular weight genomic DNA ready for long-term storage.

**+Reads and records barcodes** on primary tubes throughout the process to preserve sample identification.



# Walk away system NA-480 PLUS makes the process of DNA isolation simpler, better, cleaner and more productive.

Nucleic acid isolation from whole blood is the initial step for many genomic based diagnostic workflow and dedicated work required for your safety. NA-480 PLUS process the DNA extraction and isolation work with better efficiency and bring better results.



**Easy To Use**  
Totally automates entire process for genomic DNA extraction from primary tubes to DNA storage tubes

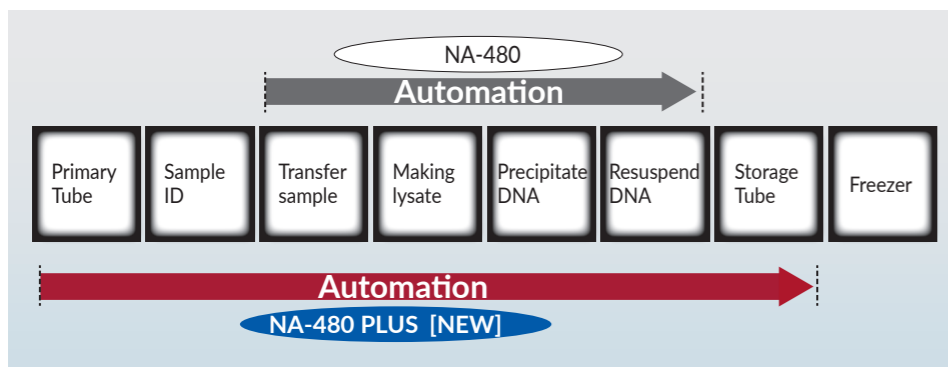
**Customer's Safety**  
Safety level improved by eliminating errors

**Sample Identification**  
Features sample tracking and reporting software

## Workflow

### Fully automated genomic DNA extraction and isolation

DNA extracted by following steps. Transfer sample from primary tube, lyse red blood cells, lyse white blood cells, protein removed and DNA precipitated, washed and resuspend DNA in buffer. The derived DNA can use for PCR, NGS, southern blotting, and so on.

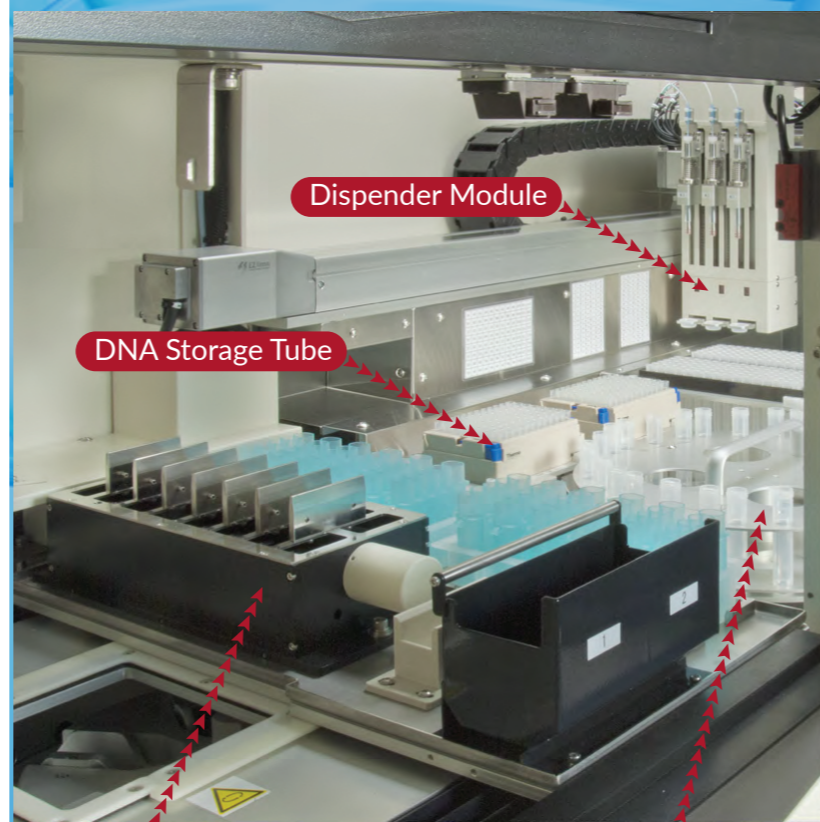


Sample Tracking Software



DNA extraction unit

Dispenser unit



Agitation / Heating Module

Primary Tube Tray

## GENE PREP STAR - Automated DNA extraction NA-480 PLUS

### Key Features

#### Easy To Use:

- Designed for DNA extraction from large volume of whole blood.
- Automates entire process for genomic DNA extraction from primary tubes to DNA storage tubes. Sends e-mail notification when the run is complete.
- Ability to modify parameters and store as new protocols.

#### Customer's Safety

- Prevent you from sample to reduce the possible risk of injuries and accidents.
- Provide liquid level detection / clot detection for accurate pipetting using positive air pressure. Enable e-mail alert.
- Restart function allows error correction and continuation of a run.

#### Sample Identification

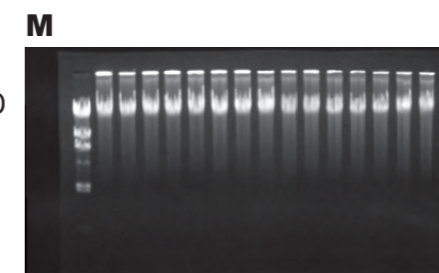
- Ability to read and record barcodes on primary tubes throughout the process to preserve sample integrity.
- Reads and records barcodes on primary tubes. Has an internal barcode scanner to verify sample input and DNA output position.
- Creates a map of sample and DNA output positions.

#### Throughput

- Run up to 30 samples in a single run.
- Can draw sample from a variety of primary tube sizes.
- Sample type: Fresh or frozen whole blood, buffy coats, Oragene DNA saliva, animal tissue, cells, buccal swabs, and so on.
- Extract DNA from 1.0 to 10.0mls whole blood.

### Example of DNA extraction from whole blood

5ml whole blood  
Reagent kit: NR-120



M :  $\lambda$ /Hind III  
Gel : 0.7% Agarose gel  
Buffer : 1xTAE

### Yield and Purity

Protocol	Sample Amount	Yield	Purity	Process time
Frozen blood	5ml	100-220 $\mu$ g	1.8-1.9	4h / 30 samples
Oragene Saliva	2ml	10-100 $\mu$ g	1.8-2.0	2.6h / 30 samples