OPTIMIZE SAMPLE PURIFICATION WITH THE BIOMEK 15* NUCLEIC ACID SOLUTION



CLEANUP. EXTRACTION. ADVANCED EXTRACTION.



Disease research often involves the analysis of nucleic acid from multiple biological sources, possibly originating from the same donor. Extraction methods are tailored to remove proteins and other impurities unique to each sample type, ensuring high-quality nucleic acid for downstream applications. The repetitive pipetting steps in these processes are prone to human error. Automation reduces user interaction and thus sample variability.

The Biomek i5 Nucleic Acid Solution combines industry-leading automation technology and proprietary SPRI-based chemistry to deliver optimized purification methods for a variety of sample types. The instrument is available in three configurations based on your needs. Compared to manual operation, the Biomek i5 Nucleic Acid Solution provides:

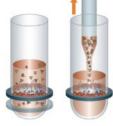
- Reduced hands-on time and increased throughput
- Reduction in pipetting errors
- Standardized workflow for improved results
- Quick implementation with demonstrated methods
- Knowledgeable support for reagents, automation and methods all from a single vendor

Solid Phase Reversible Immobilization (SPRI) Methodology

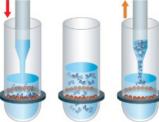
STEP 1: BIND STEP 2: WASH STEP 3: ELUTE



Paramagnetic SPRI beads are directly added to the samples. Nucleic acids are selectively immobilized onto SPRI beads.



A magnetic field is used to pull the microparticles out of solution. Contaminants are aspirated and microparticles are thoroughly washed.



Purified nucleic acids are easily eluted from the beads under aqueous conditions and are transferred to a new plate for downstream applications.

Biomek i5 Nucleic Acid Solution - Demonstrated Methods

	PURIFIED	INPUT MATERIAL		CONFIGURATION			
	NUCLEIC ACID		METHOD	BIOMEK i5 CLEANUP	BIOMEK i5 EXTRACTION	BIOMEK i5 ADVANCED EXTRACTION	
Cleanup and Size Selection	DNA	NGS libraries and PCR products	AMPure XP	•	•	•	
			SPRIselect	•	•	•	
		Sanger sequencing reactions	CleanSEQ	•	•	•	
	cDNA/RNA	cDNA synthesis and in vitro transcription reactions	RNAClean XP	•	•	•	
Nucleic Acid Isolation	DNA	Tissue, Saliva and Buccal swab	DNAdvance		•	•	
		Blood, Cells and Serum	GenFind V3		•	•	
		FFPE	FormaPure XL DNA		0	•	
	cfDNA	Plasma, Serum and Urine	Apostle MiniMax™			•	
	RNA	Blood	RNAdvance Blood		•	•	
		Cells	RNAdvance Cell		•	•	
		Tissue	RNAdvance Tissue		•	•	
		FFPE	FormaPure XL RNA		0	•	
	DNA & RNA	Saliva and Transport media	RNAdvance Viral		•	•	
		Transport media	RNAdvance Viral XP		•	•	
		FFPE	FormaPure XL Total		0	•	

[•] Demonstrated Method. This indicates that the method was developed for a sample preparation kit following the published manual protocol. Each one is tested with scientifically relevant samples and has yielded results that meet the kit's specifications either in a customer lab or in a Beckman Coulter Life Sciences Lab. Beckman Coulter makes no claims or warranties regarding the use or performance of these methods.

o Additional components required.

METHOD	MAXIMUM SAMPLE INPUT	SAMPLES PER RUN	HANDS-ON TIME	USER INTERACTIONS	TOTAL TIME
Apostle MiniMax™ High Efficiency cfDNA Isolation	4 mL	48	30 min	2	5 hr
FormaPure XL Total	7 x 10 µm thick FFPE sections	24	30 min	3	6 hr, 50 min
GenFind V3 Blood	400 µL	48	30 min	2	2 hr, 50 min
DNAdvance Tissue	20 mg	192	15 min	2	2 hr
RNAdvance Blood	400 µL	192	25 min	2	2 hr, 20 min
RNAdvance Viral	200 μL	192	25 min	2	1 hr, 30 min
RNAdvance Viral XP	200 µL	192	25 min	2	1 hr, 15 min

To learn more or request a quote, please contact your Beckman Coulter Life Sciences Sales Consultant.



^{*}Biomek Automated Workstation Stations and methods are not intended or validated for use in the diagnosis of disease or other conditions. In some cases, method data was generated on pre-production automated workstations.

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