

Biomek i5 Multichannel Nucleic Acid Solutions

High-performance chemistry. Advanced liquid handling.
One trusted supplier for your extraction and automation needs.



DISCOVERY
in motion.

 **BECKMAN
COULTER**
Life Sciences

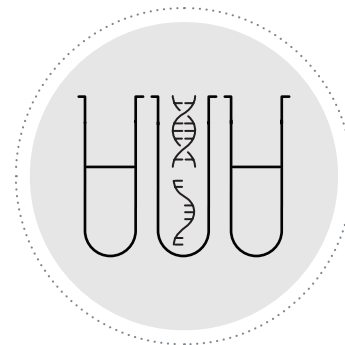
Our Comprehensive Portfolio of Genomic Reagents

Our growing portfolio of genomic reagent kits includes nucleic acid extraction and purification kits built on a proprietary Solid Phase Reversible Immobilization (SPRI) technology. High-performance SPRI technology uses paramagnetic beads to selectively immobilize nucleic acids by type and size. Optimized binding conditions enable highly specific nucleic acid separation and cleanup to take your genome studies further.

Total nucleic acid isolation

Transport media, saliva, FFPE tissue

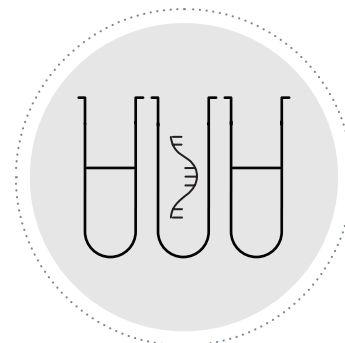
- RNAdvance Viral & Viral XP
- FormaPure XL Total



RNA isolation

Blood, tissue, cells, FFPE

- RNAdvance Blood
- RNAdvance Cell
- RNAdvance Tissue
- FormaPure XL DNA



DNA isolation

Blood, plasma, serum, urine, FFPE, tissue

- GenFind V3
- FormaPure XL DNA
- DNAdvance
- Apostle MiniMax™ High Efficiency cfDNA



Cleanup & size selection

PCR purification, dye removal, size selection

- AMPureXP
- SPRIselect
- RNAClean XP
- CleanSEQ



Our Industry-Leading Automation

Extraction methods are tailored to remove proteins and other impurities unique to each sample type, ensuring high-quality nucleic acid for downstream applications. As repetitive pipetting steps in these processes are prone to human error, automation reduces user interaction and thus sample variability.

Simplicity so you can focus more on science

- Multi-color status light bar alerts you to the current mode of the instrument, even from across the room
- LED illuminated deck for easy access and monitoring your workspace status
- Intuitive software for effortless operation

Reliability and support to maximize instrument uptime

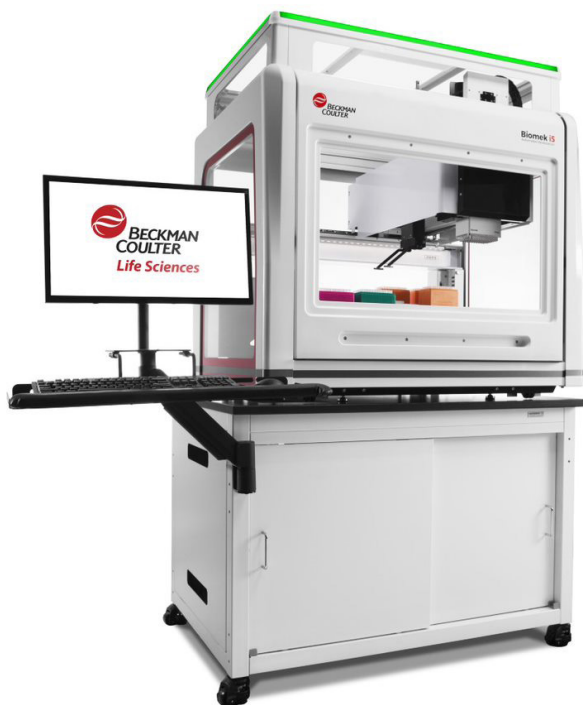
- Safeguard sample and reagent integrity from air particulates with enclosed workstations
- Vertical sliding door on enclosure provides front access without aisle obstruction
- Onboard cameras enable live broadcast and on-error video capture to expedite response time and system diagnosis

Efficiency to help deliver productivity

- Rotating gripper with unique offset finger design optimizes access to high-density decks, enabling more efficient workflows
- Linear motion control increases positional accuracy for pipetting access to high-density labware
- Large-volume, 1 mL multichannel pipetting head expedites sample transfers and enables more efficient mixing steps

Adaptability to extend scale and reach

- Grid-based deck with simple accessory installation enables quick workflow changes
- Spacious, open-platform design enables access from all sides to enable integration of adjacent-to-deck and off-deck processing elements (e.g., analytical devices, external storage/incubation units, and labware feeders)



Biomek i5 Nucleic Acid Solutions

We've combined our expertise in reagent chemistry and automation, providing you three configurations to suit increasing workflow complexity. This offers the benefits of a plug-and-play system with the ability to add components later for enhanced functionality.



Biomek i5 Cleanup Solution

- Automated Beckman Cleanup methods: **AMPure XP, SPRIselect, RNAClean XP & CleanSEQ**
- Large-volume (1 mL) 96-channel pipetting head expedites sample transfers and enables more efficient mixing steps
- Enclosure provides environmental control
- Multichannel wash station for tip washing
- Versatile workspace with up to 25 deck positions

Biomek i5 Extraction Solution

- Automated Beckman Extraction methods: **DNAdvance, RNAdvance & GenFind V3**
- All the features of the Cleanup Solution plus:
 - Orbital shaker provides user-defined mixing of solutions, reliable agitation of plates and vortexing
 - Static peltier provides temperature control between 4°C and 100°C in 0.1°C increments
 - Fly-By Barcode Reader for sample tracking

Biomek i5 Advanced Extraction Solution

- Automated Beckman Extraction methods: **DNAdvance, RNAdvance, GenFind V3, Apostle MiniMax™, FormaPure XL**
- All the features of the Extraction Solution plus:
 - Incubators to minimize sample evaporation while heating
 - An extra static peltier for parallel processing

Data Demonstrated Methods

Providing you confidence to get up and running quickly

	Purified Nucleic Acid	Input Material	Method	Configuration		
				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		◦	•
	cfDNA	Plasma, Serum and Urine	Apostle MiniMax™			•
	RNA	Blood	RNAdvance Blood		•	•
		Cells	RNAdvance Cell		•	•
		Tissue	RNAdvance Tissue		•	•
		FFPE	FormaPure XL RNA		◦	•
	DNA & RNA	Transport media	RNAdvance Viral		•	•
			RNAdvance Viral XP		•	•
FFPE		FormaPure XL Total		◦	•	

- **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.
- Additional components are required



Biomek Software

Intelligence at every step

- Biomek software gives you unprecedented control over your workflow.
- Modular methods help optimize flexibility for throughput and scheduling.
- Point-and-click interface simplifies method authoring with no programming required.
- Captures the data you need to validate your processes and help ensure reproducible results.
- Lets you “lock down” the instrument and protect validated methods from being altered inadvertently by operators.
- Enables remote instrument monitoring using any device with a Google Chrome browser.
- Software security protects validated methods.

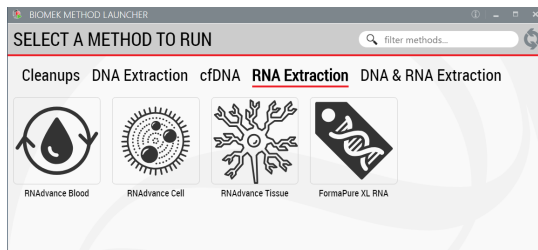
Benefit from software packages that provide simplicity and flexibility when adding automated genomic methods to your workflow. This enables development of demonstrated, ready-to-implement methods that streamline your process, improve efficiency and significantly reduce hands-on time.

Biomek Method Launcher

As easy as 1, 2, 3, 4

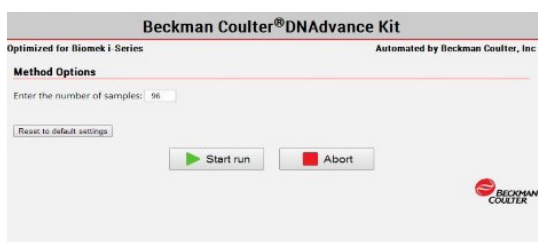
1. Biomek Method Launcher (BML) -

Launch predefined methods through a secure interface and conduct system maintenance without affecting method integrity



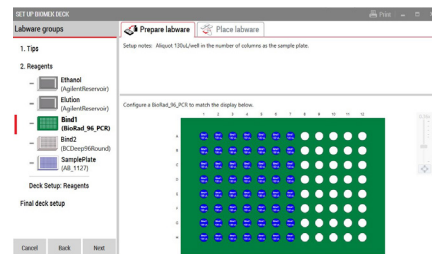
2. Method Options Selector (MOS) -

Select run-time options and maximize flexibility in daily scheduling and method execution



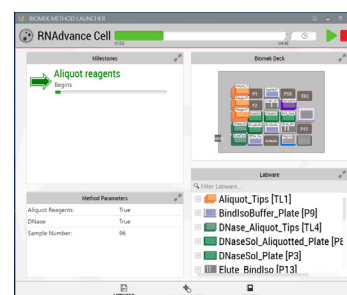
3. Guided Labware Setup (GLS) -

Add reagents and consumables to the deck using easy-to-follow instructions, specific to options selected in the MOS



4. Run Status Screen (RSS) -

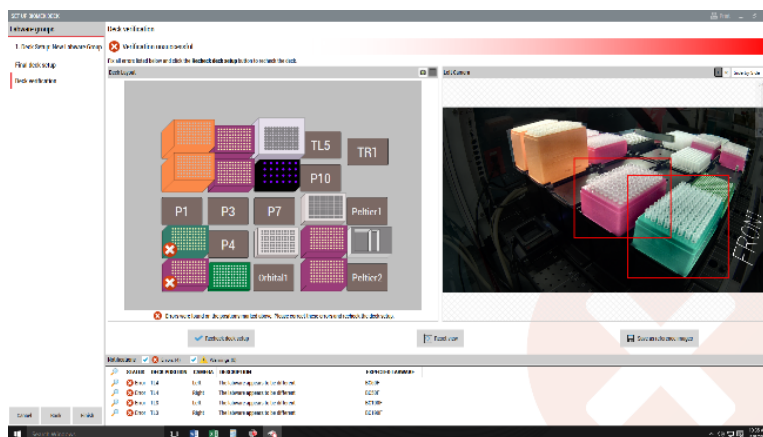
Track specific run progress and sample readiness, and receive real-time updates of the time to completion



DeckOptix Final Check

Analyzes the deck for common setup errors and alerts you prior to the start of a run

- Operator-friendly method interface
- Guided labware setup
- 5-second deck verification
- Remote monitoring capabilities



Biomek Pipetting Tips

The most critical point of contact

Biomek pipette tips from Beckman Coulter are certified to be:

- **RNase- and DNase-free***
Ensures high-quality nucleic acid purification and reliable testing results.
- **DNA-free (human & mouse) and PCR inhibitor-free**
Confirms the absence of both human and mouse DNA contaminants that contribute to erroneous results and interfere with PCR.
- **Pyrogen-free**
Addresses pyrogen-sensitive applications, such as cell transformations and preparative protocols that use extracted biological material for in vivo experimentation.
- **Trace metal-free**
Reduces chemical interference due to chelation and denaturation.

* Bio-certification "free of" claims are defined as the lower limit of detection based on the sensitivity of the test method or instrumentation used.

Trusted reliability and support to reduce downtime

Doing everything possible to ensure you can operate your Biomek workstations with confidence

We go above and beyond to provide exceptional support to ensure you can operate your Biomek workstations with confidence.

- Customer **training program** and **application support** help you get up and running
- **Onboard cameras** enable live broadcast and on-error video capture to expedite response time
- **BeckmanConnect** remote connectivity platform offers a secure connection, helping to troubleshoot and resolve your instrument issue remotely



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.

The automated methods identified are demonstrated methods only and are not validated by Beckman Coulter. Beckman Coulter makes no warranties of any kind whatsoever express or implied, with respect to this protocol, including but not limited to warranties of fitness for a particular purpose or merchantability or that the protocol is non-infringing. All warranties are expressly disclaimed. Your use of the method is solely at your own risk, without recourse to Beckman Coulter. Not intended or validated for use in the diagnosis of disease or other conditions. The demonstrated methods are available through Beckman Coulter automation field applications team.

Beckman Coulter Life Sciences genomic reagent kits are for research use only.

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