

# CleanSEQ Purification Application on the Biomek 4000 Workstation

Technical Information Bulletin

## Reproducible and Efficient Automation of DTR Purification Using the Biomek 4000 Workstation and CleanSEQ

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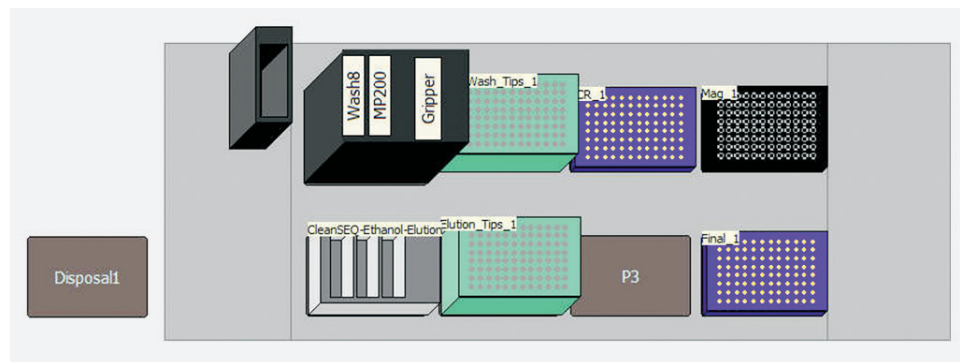
The Agencourt CleanSEQ® application for the Biomek 4000 Laboratory Automation Workstation is a rapid, high performance dye-terminator removal (DTR) method utilizing Solid Phase Reversible Immobilization (SPRI) paramagnetic bead-based technology. The Agencourt CleanSEQ method follows a simple three-step protocol that requires no centrifugation or filtration and efficiently purifies sequencing products to deliver exceptional quality sequencing data.

The combination of the Biomek 4000 Workstation and the CleanSEQ purification system improves reproducibility, reduces the opportunity for human error, and cuts labor and reagent costs.

### Flexible Purification

The CleanSEQ Application on the Biomek 4000 Workstation is a validated and fully supported method. It is supplemented with software that provides a graphical user interface (GUI) and additional software tools and utilities. Ease of use and an informative and feature-rich GUI provides optimal outcomes for all users of the method. The method's scalability and automation-friendly format also allows for a streamlined sample process.

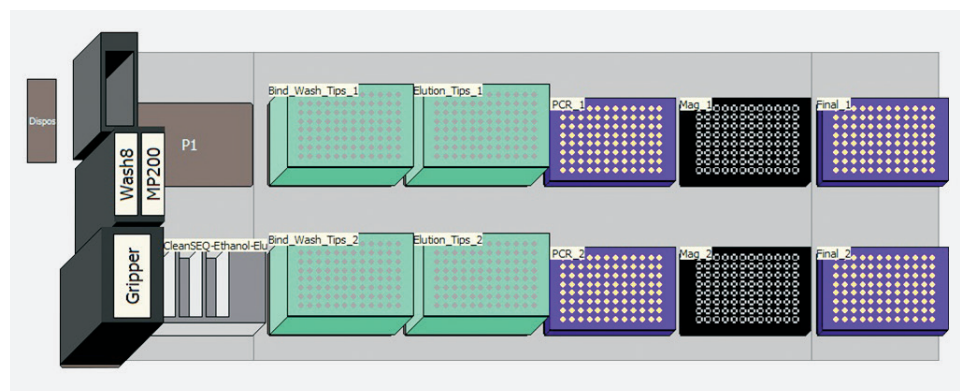
The Agencourt CleanSEQ application can process one or two 96-well plates simultaneously, and has the capability of processing partial sample plates specified by column.



### Deck Layout for a Single-Plate Configuration

Run time:

One 96-well plate = ~65 minutes



### Deck Layout for a Two-Plate Configuration

Run times:

One 96-well plate = ~65 minutes

Two 96-well plates = ~115 minutes

## Graphical User Interface (GUI)

The method GUI includes numerous options and protocol selections and is customizable by the user. It allows the user to define the inputs and outputs for each run, and supports a broad range of operating parameters for a wide range of plate types.



GUI Quick Start Tab

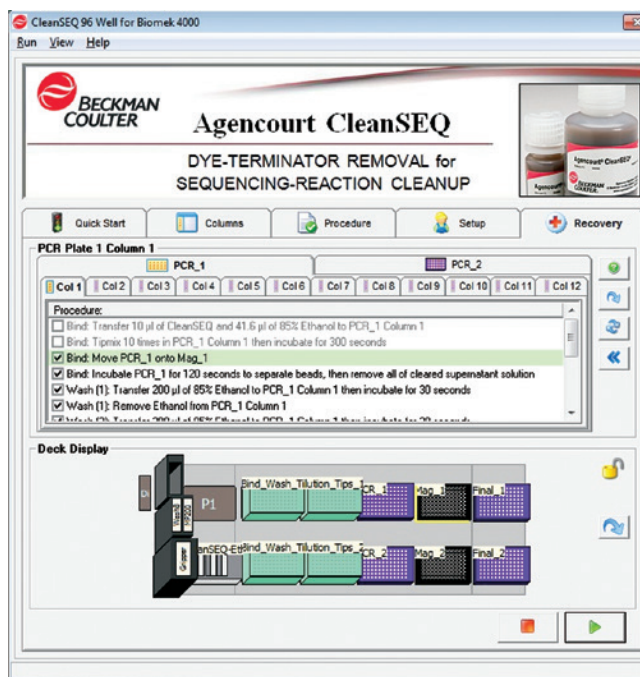
## GUI Features

- Selection of the number of plates to process with the input and output volumes
- LIMS tracking of run operator and CleanSEQ reagent lot numbers
- Option to enable archiving and retrieval of GUI parameters and run specific information to and from file storage
- Labware selection for input PCR plate and final plate
- Processing of any combination of individual columns within plate
- Capability to specify or modify CleanSEQ protocol and operating parameters
- Password protection option to lock method protocol inputs
- Guide to setup instrument with labware and reagents
- Run setup wizard including a reagent volume calculator to determine appropriate volumes of reagents
- Provides detailed instructions to setup the deck with labware and reagents
- Effective method recovery from an interrupted run at any step

## Method Recovery

*The CleanSEQ method provides ways to recover or restart the method efficiently*

The CleanSEQ method has the capability for method recovery and restarting of the method from any point within the protocol. The method recovery feature allows the user to see exactly where the CleanSEQ method was interrupted to more efficiently recover it. It also visually indicates which steps were completed for each PCR plate and individual column for ease of use.



GUI Method Recovery Tab



**Method Requirements** (Required Tools, ALPs, Magnets, Reservoirs, and Consumables)

Type	Qty	Description	Part No.	Notes
Tools	1	Gripper Tool	987371	—
	1	Eight-Channel Wash Tool	987370	—
	1	MP200 Eight-Tip Pipette Tool	986146	—
ALPs	1	Liquid Waste ALP	B21398	—
	1	Disposal ALP	609751	—
	5	Labware Holder	609120	3 additional required for two-plate configuration
	2	Tip Rack Holder	391910	2 additional required for two-plate configuration
	1	Gripper Tool Rack	609641	Required for single-plate configuration only
	1	Wash Unit	609056	With or without a 6-Port Valve
	1	Off Deck Gripper Rack	B21400	Required for two-plate configuration only
	1	Off Deck Tool Rack Mount	B21399	Required for two-plate configuration only
	1	Left Side Module	987264	Required for two-plate configuration only
	1	Right Side Module	987263	Required for two-plate configuration only
Magnet Plate	1	Agencourt SPRIPlate 96R – Ring Super Magnet Plate	A32782	Magnet Plate A29164 is also sufficient
Reservoirs	1	Reservoir Frame	372795	Reusable
	3	Quarter Reservoir	372790	Reusable
	1	Bottle (off deck)	N/A	Associated with the Wash Tool (ethanol)
Consumables	2	Biomek AP96 P250 Tipboxes	717251	Case of 10 racks
	2	96-Well PCR Plate	N/A	ABGene 1400 or equivalent
	N/A	85% Ethanol	N/A	Non-denatured ethanol recommended

**Ordering Information**

Part Number	Description
B31070	Biomek 4000 CleanSEQ Application
A29151	Agencourt CleanSEQ Kit – 8 mL
A29154	Agencourt CleanSEQ Kit – 50 mL
A29161	Agencourt CleanSEQ Kit – 500 mL

For more information, please contact your local Beckman Coulter representative or visit our Biomek 4000 Workstation website:

[www.biomek4k.com](http://www.biomek4k.com)



\*The CleanSEQ Application is not intended or validated for use in the diagnosis of disease or other conditions, and thus has "No Designation" in regards to its intended use.

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