



Biomek i5 Nucleic Acid Extraction Solution – Viral Nucleic Acid

RNAdvance Viral and RNAdvance Viral XP



Methods

The method performs extraction of nucleic acid from nasopharyngeal (NP) or oropharyngeal (OP) swabs in transport media, and saliva in a 96-well plate format. Starting input volumes of 200 μ L from a sample are lysed followed by nucleic acid paramagnetic bead binding. The bound nucleic acid and paramagnetic beads isolated are then captured with a magnet and the residual solution is transferred to waste. The beads are washed to remove contaminants and the viral nucleic acids are eluted from the beads in nuclease-free water.

Extraction Process Workflow

RNAdvance Viral Workflow

Aliquot reagents Add Lysis (LBE) Add Bind (BBD) Wash steps Elution

RNAdvance Viral XP Workflow

Add Lysis (LBE) Add Bind (VBE) Wash 2x EtOH Elution

Total Estimated Time

		RNAdvance Viral	RNAdvance Viral XP
00	Hands-on Time	15 min	10 min
96 samples (1 plate)	Total Time	1 hr, 15 min	55 min
100	Hands-on Time	15 min	10 min
192 samples (2 plates)	Total Time	1 hr, 30 min	1 hr, 15 min

Input Material, Reagents, Consumables

Input Material

Sample Type	Transport Media	RNAdvance Viral	RNAdvance Viral XP	Storage Temperature
NP/OP swabs	VTM/UTM	200μL	200μL	2 - 8°C<72 hrs or -70°C>72hrs
		200μL	NR	Outside collection device recommend storage condition
Saliva	none	200μL	NR	Ambient <72 hr

NR = Not Recommended

Reagents

Description	Supplier	Storage Temperature
RNAdvance Viral Reagent Kit, 768 Preps	Beckman Coulter	Proteinase K -15 to -25°C Other Components 15 - 30°C
RNAdvance Viral XP Reagent Kit, 1056 Preps	Beckman Coulter	15 - 30°C
100% Ethanol (Molecular Grade)	User	Room Temp
100% Isopropanol (Molecular Grade)	User	Room Temp
Nuclease-free water (Molecular Grade)	User	Room Temp

Consumable Plastics

Description	Supplier	RNAdvance Viral Quantity - 2 plates	RNAdvance Viral XP Quantity - 2 plates
1025µL Pipette Tips, non-Sterile Filtered	Beckman	6	-
190 μL Pipette Tips, non-Sterile Filtered	Beckman	3	6
Quarter Reservoir	Beckman	1	-
Quarter Reservoir, Divided by Length	Beckman	1	-
Reservoir, Half	Beckman	1	-
Hard-Shell® Thin-Wall 96-well Skirted PCR Plates, clear wells	BioRad	3	2
V-bottom 2.2 mL plate. 96-well. PP Sterile	ABgene	7	4
Reservoir 96 Well Pyramid PP 287 mL 25/CS	Agilent	3	3

Method Overview

Biomek Method Launcher (BML)

BML organizes methods into useful groups.



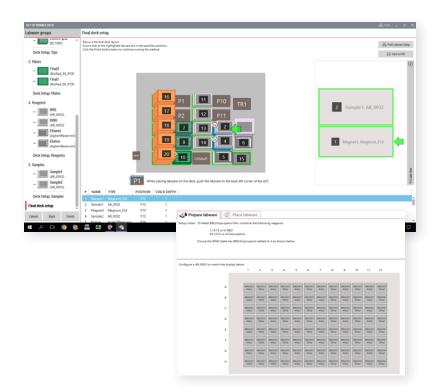
Method Options Selector (MOS)

MOS enables flexibility specific to your sample process batch size, process options and workflow customization.

Beckman Coulter® RNAdvance Viral Nucleic Acid Isolation		
Optimized for Biomek i-Series	Automated by Beckman Coulter, Inc	
Workflow Options		
Enter Number of Plates to Process: 2 (1 to 2 plates)		
Aliquot Reagents: ♥		
Extract Viral Nucleic Acid:		
Method Options		
Lysis Bind Wash Elution		
Perform Lysis Section:		
Enter Starting Swab Solution Volume: 200 uL. (100ul to 200ul)		
Enter Proteinase K Volume: 10 uL. (5ul to 10ul)		
Enter LBF Volume: 150 uL. (75ul to 150ul)		
Enter Lysis Time: 20 minutes. (10 to 30 minutes)		

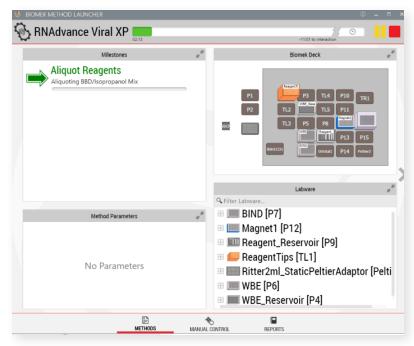
Guided Labware Setup (GLS)

GLS provides clear instructions to set up the instrument deck with calculated reagent volume and step-by-step instructions to prepare reagents based on options selected.



Run Status Screen (RSS)

RSS shows the progress of run, current activity and time to completion.



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