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# AZUL SARS COV-2 RNA EXTRACTION KIT

RNA IN 40 MINS | GOOD YIELDS FOR USE IN PCR/SEQUENCING

## PRODUCT BROCHURE



Cat No-RE101

## PRODUCT DESCRIPTION

AZUL SARS-CoV-2 RNA Extraction Kit offers a straightforward and highly efficient solution for extracting total RNA from SARS-CoV-2 virus particles present in Viral Transport Medium (VTM) or molecular transport medium (MTM) obtained from COVID-19 positive patients via throat/nasopharyngeal swabs. This kit uses a silica-based spin column technology for isolating RNA from biological samples, thereby eliminating toxic phenol-chloroform extractions. The eluted RNA is suitable for a wide range of molecular biology applications, including semi-quantitative PCR and real-time quantitative PCR (RT-qPCR) analysis.

## KIT COMPONENTS

Components	For 50 preps	For 25 preps	
Lysis Buffer(LB)	15mL	8mL	
Binding buffer(BB)	25mL	13mL	
Wash Buffer 1(WB1)	30mL	15mL	
Wash Buffer 2(WB2)	25mL	13mL	
Elution Buffer(EB)	4mL	2mL	
Spin Column	50 (Pouch pack)	25 (Pouch pack)	



## **SPECIFICATIONS**

Format	Spin column	
Sample type	SARS-CoV-2 samples	
Equipment	Microcentrifuge	
Processing time	<40 mins	
Processing volume	300μL - 1mL	
Туре	Total RNA	
Sample storage	Eluted RNA should be stored at ≤ -20°C	
Yield	2-10 µg	
Purity	A260/280 ≥ 2.0	
Kit Storage	Room Temperature	
Kit Validity	Viable for 1 year if stored at appropriate conditions	

**NOTE:** Check the Binding Buffer and Lysis Buffer for any salt precipitation before every use. Re-dissolve any precipitate by warming the solution to 37°C, then cool it back to room temperature before use.



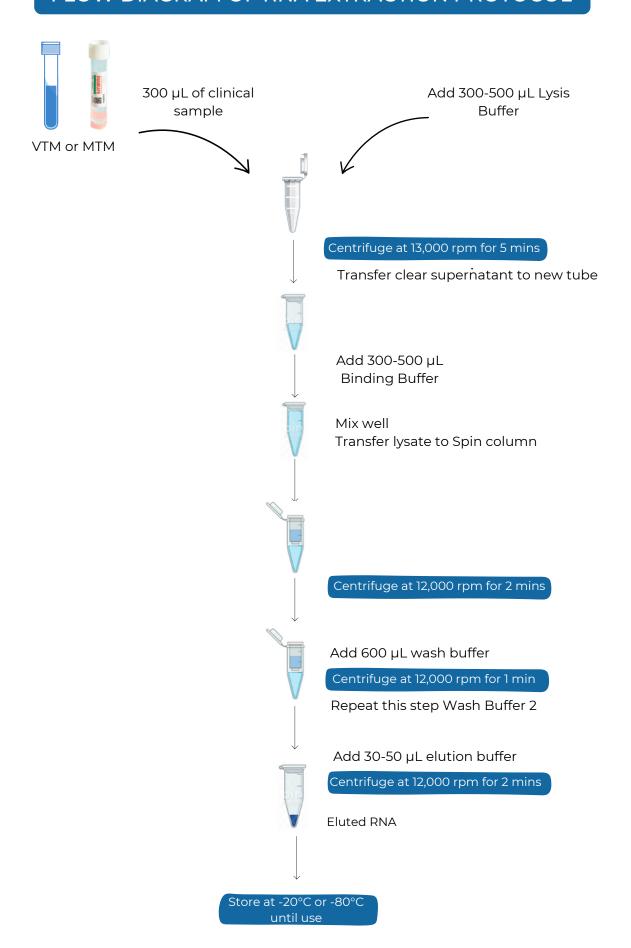
## RNA EXTRACTION PROTOCOL

- 1.300µL of clinical samples collected from viral transport medium (VTM) or molecular transport medium (MTM) is added to a 1.5mL microfuge tube having 300 µL of Lysis Buffer and mixed well by pipetting up and down for complete homogenization of the sample. Vortex for 30 seconds to mix thoroughly. Centrifuge the microfuge tube for 5 min at 13,000 rpm.
- 2. Transfer the clear supernatant into a new sterile microcentrifuge tube.
- 3.Add 300 µL 500 µL of Binding Buffer and mix slowly by pipetting.
- 4.Transfer up to 700µL lysate to the spin column inserted in a collection tube.

  Centrifuge the column for 2 min at 12,000 rpm.
- 5. Discard the flowthrough and place the purification column back into the collection tube. Repeat this step until the entire lysate has been transferred into the column and centrifuged.
- 6.Add 600  $\mu L$  of Wash Buffer 1 to the spin column and centrifuge for 1 min at 12000 rpm.
- 7.Add 500 µL of Wash Buffer 2 to the spin column and centrifuge for 1 min at 12000 rpm.
- 8.Transfer purification to a clean, sterile microfuge tube and add 30µL 50µL of TE buffer or DNase/RNase-free water to the centre of the column.
- 9. Centrifuge the column at 12,000 rpm for 2min.
- 10. Discard the purification column and use the flowthrough with RNA directly for the quantitative real time PCR application.
- 11. Store the isolated RNA at -20°C or -80°C until use.



## FLOW DIAGRAM OF RNA EXTRACTION PROTOCOL





## TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSES	SUGGESTED SOLUTIONS	
Low RNA Yield	Sample input: Too much input.	Use less input material or increase the volume of the Lysis Buffer.	
Low RNA Purity(A260/A280)	Improper sample handling results in ethanol or salt contamination	Make sure lysate and wash buffers have passed entirely through the matrix of the column. This may require centrifuging at a higher speed or longer time.	
RNA Degradation	Use of samples not stored at appropriate conditions	To prevent RNA degradation: Immediately collect and lyse fresh samples into a Lysis Buffer.  Collect and store the samples in RNA WRAPR Solution to ensure stability & integrity of RNA and process later.	



## ORDERING INFO

CATALOG NO	PRODUCT	PREP
RE101	AZUL SARS- CoV-2 Kit RNA Extraction Kit	25/50 preps
RE102	AZUL Tissue RNA Extraction Kit	25/50 preps
RE103	AZUL Bacterial RNA Extraction Kit	25/50 preps
RE104	AZUL Plant RNA Extraction Kit	25/50 preps
RE105	AZUL Soil RNA Extraction Kit	25/50 preps
RE106	AZUL Animal Cell Culture RNA Extraction Kit	25/50 preps
RE107	AZUL Blood RNA Extraction Kit	25/50 preps
RE108	AZUL Stool RNA Extraction Kit	25/50 preps
RE109	AZUL Saliva RNA Extraction Kit	25/50 preps
RE113	AZUL Microbiome RNA Extraction Kit	25/50 preps
RE114	AZUL Fungal RNA Extraction Kit	25/50 preps
RE115	AZUL FFPE RNA Extraction Kit	25/50 preps



## FEEDBACK

#### How did this kit perform?

Did AZUL Extraction Kit fulfill expectations required for your research?

Let us know by filling out the feedback form <u>here</u>

Or scan the QR code:



### **CONTACT US**





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