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AZUL MICROBIOME DNA EXTRACTION KIT

DNA IN 75 MINS | GOOD YIELDS FOR USE IN PCR/SEQUENCING

PRODUCT BROCHURE



Cat No-DE113

ISO 13485 CERTIFIED

PRODUCT DESCRIPTION

AZUL Microbiome DNA Extraction Kit is an easy and efficient system for the isolation of high-quality microbial and host DNA from samples like vaginal, tears, or vitreous humor samples. This kit uses a silica-based spin column technology for isolating DNA from biological samples, thereby eliminating toxic phenol-chloroform extractions. The eluted DNA is suitable for all sensitive downstream applications such as qPCR and Next-Generation sequencing.

KIT COMPONENTS

Components	For 50 preps	For 25 preps
Lysis Buffer 1 (LB1)	35 mL	20 mL
Lysis Buffer 2 (LB2)	3 mL	2 mL
Binding Buffer (BB)	25 mL	15 mL
Proteinase K	3 mL	2 mL
Wash Buffer 1 (WB1)	25 mL	15 mL
Wash Buffer 2 (WB2)	25 mL	15 mL
Elution Buffer (EB)	4 mL	2 mL
Spin Column	50 (Pouch pack)	25 (Pouch pack)

SPECIFICATIONS

Format	Spin Column
Sample type	Vaginal, Tears or Vitreous Humor Samples
Equipment	Microcentrifuge
Processing time	<75 mins
Processing volume	>250 μ L - 1 mL
Type	Total DNA
Sample storage	Eluted DNA should be stored at $\leq -20^{\circ}\text{C}$
Yield	1 - 5 μ g
Purity	$A_{260}/A_{280} \geq 1.8$
Kit Storage	Room Temperature
Kit Validity	Viable for 1 year if stored at appropriate conditions

NOTE: Check the Lysis Buffer and Binding 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.

DNA EXTRACTION PROTOCOL

1. Take around >250 μL of tears or vitreous humor samples collected or swab samples of vagina collected in any medium or stored in mWRAPR Microbiome stabilization solution in a microfuge tube.
2. Add 500 μL - 700 μL of Lysis Buffer 1 (LB1), and 50 μL of Lysis Buffer 2 (LB2) into the tube.
3. Mix briefly by vortexing the tube for 30 sec.
4. Add 50 μL of Proteinase K to the tube and incubate at 56°C for 30 mins.
5. Centrifuge the tube at 15,000 rpm for 10 mins. Transfer the clear supernatant to a new microfuge tube.
6. Add 500 μL Binding Buffer (BB) to this suspension and mix briefly by inverting the tube a few times. Incubate the tube at -20°C for 15 mins.
7. Mix well and transfer the suspension to a spin column and centrifuge the tube at 15,000 rpm for 2 mins.
8. Discard the flow-through and place the purification column back into the collection tube. Repeat this step until complete lysate has been transferred into the column and centrifuged.
9. Wash the spin column with 500 μL Wash Buffer 1 (WB1) at 15,000 rpm for 1 min and discard the flow through.
10. Add 500 μL of Wash Buffer 2 (WB2) to the column and centrifuge at 15,000 rpm for 1 min to completely remove salts and impurities.
11. Keep the purification column in a clean, sterile 1.5 mL microfuge tube and add 25 μL - 30 μL of Elution Buffer or DNase/RNase-free water to the center of the column.
12. Centrifuge the column for 15,000 rpm for 2 mins.
13. Discard the purification column and store the eluted DNA at -20°C or -80°C until use.

FLOW DIAGRAM OF DNA EXTRACTION PROTOCOL

>250 μ L of Liquid/stored sample



500 μ L-700 μ L Lysis Buffer 1,
50 μ L Lysis Buffer 2



50 μ L Proteinase K
Incubate at 56°C for 30 mins



Centrifuge at 15,000 rpm for 10 mins

Transfer clear supernatant to new tube

Add 500 μ L
Binding Buffer



Keep at -20°C for 15 mins

Mix well
Transfer lysate to Spin column



Centrifuge at 15,000 rpm for 2 mins

Add 500 μ L Wash Buffer 1

Centrifuge at 15,000 rpm for 1 min



Add 500 μ L Wash Buffer 2

Centrifuge at 15,000 rpm for 1 min



Add 25 μ L - 30 μ L Elution Buffer

Centrifuge at 15,000 rpm for 2 mins

Eluted DNA

Store at -20°C or
-80°C until use

TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSES	SUGGESTED SOLUTIONS
Low DNA Yield	Sample input: Less sample input	Use of ≥ 250 μL of sample is recommended for good DNA yield.
Low DNA 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.
	Incomplete lysis or cellular debris	Increase the volume of Lysis Buffer to ensure complete lysis. Be sure to centrifuge and pellet any cellular debris, then process the cleared lysate.
RNA Contamination	Too much sample used	To remove RNA: Perform in-column RNase I treatment or perform RNase I treatment post-purification (not provided in the kit), then re-purify the treated sample.
DNA Degradation	Usage of old samples	To prevent DNA degradation: Lyse fresh samples into a Lysis Buffer. Collect and store the fresh samples in mWRAPR Microbiome Solution to ensure stability & integrity of DNA and process later.

ORDERING INFO

CATALOG NO	PRODUCT	PREP
DE101	AZUL Tissue DNA Extraction Kit	25/50 preps
DE102	AZUL Animal Cell Culture DNA Extraction Kit	25/50 preps
DE103	AZUL Bacterial DNA Extraction Kit	25/50 preps
DE104	AZUL Plasmid DNA Extraction Kit	25/50 preps
DE105	AZUL Plant DNA Extraction Kit	25/50 preps
DE106	AZUL Soil DNA Extraction Kit	25/50 preps
DE107	AZUL Blood DNA Extraction Kit	25/50 preps
DE108	AZUL Cell-free DNA Extraction Kit	25/50 preps
DE109	AZUL DNA Extraction Kit- Difficult samples	25/50 preps
DE110	AZUL Saliva DNA Extraction Kit	25/50 preps
DE111	AZUL Stool DNA Extraction Kit	25/50 preps
DE112	Quick AZUL Bacterial/Fungal DNA Extraction Kit	25/50 preps
DE113	AZUL Microbiome DNA Extraction Kit	25/50 preps
DE114	AZUL Gel DNA Extraction Kit	25/50 preps
DE115	AZUL FFPE DNA Extraction Kit	25/50 preps
DE116	AZUL Chloroplast DNA Extraction Kit	25/50 preps
DE117	AZUL Mitochondrial DNA Extraction Kit	25/50 preps
DE118	AZUL Pollen DNA Extraction Kit	25/50 preps
DE119	AZUL Fungal DNA Extraction Kit	25/50 preps
DE120	AZUL Sperm DNA Extraction Kit	25/50 preps
DE121	AZUL Skin DNA 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 [here](#)

Or scan the QR code:



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