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azooka



AZUL BACTERIAL DNA EXTRACTION KIT

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

PRODUCT
BROCHURE



Cat No-DE103

ISO 13485 CERTIFIED

PRODUCT DESCRIPTION

AZUL Bacterial DNA Extraction Kit is an easy and efficient system for the isolation of total DNA from bacterial cells (both Gram-positive and Gram-negative bacteria). 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(LB)	25mL	13mL
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

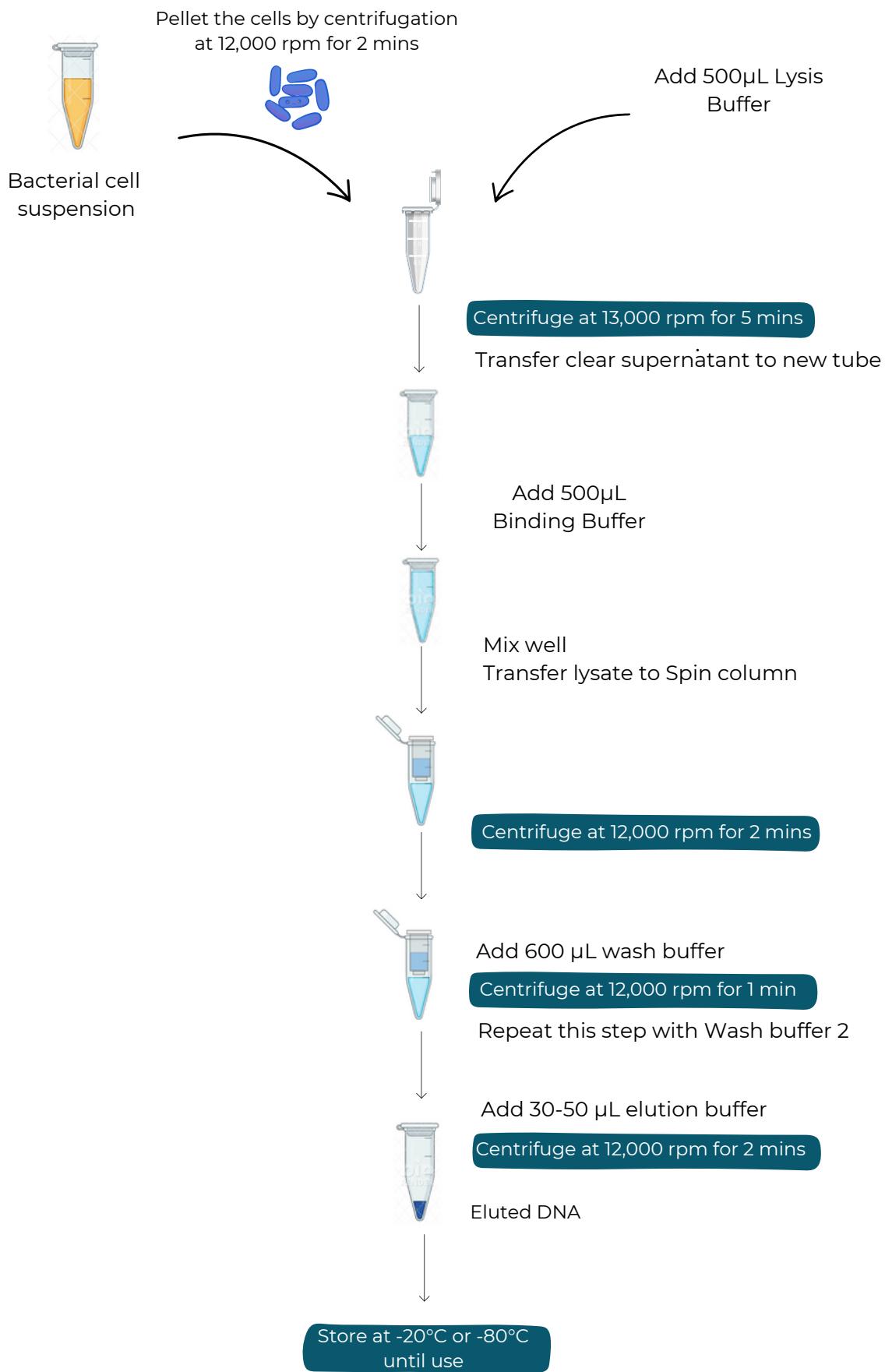
Format	Spin column
Sample type	Bacterial cells
Equipment	Microcentrifuge
Processing time	<40 mins
Processing volume	500µL - 1mL
Type	Total DNA
Sample storage	Eluted DNA should be stored at $\leq -20^{\circ}\text{C}$
Yield	50-800ng/µL
Purity	$\text{A260/280} \geq 1.8$
Kit Storage	Room Temperature
Kit 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.

DNA EXTRACTION PROTOCOL

1. In a 1.5 mL microfuge tube, take around 500 μ L - 1mL of bacterial culture and centrifuge at 12,000 rpm for 2 mins to pellet the cells.
2. Add 500 μ L of Lysis Buffer to the pellet and mix briefly by vortexing for 30 seconds.
3. Centrifuge at 13,000 rpm for 5 minutes at room temperature.
4. Carefully transfer the clear supernatant to a new 1.5 mL microfuge tube. Add 500 μ L of Binding Buffer and mix the tube briefly by inverting it a few times.
5. Transfer 800 μ L lysate to the spin column inserted in a collection tube. Centrifuge at 12,000 rpm for 2 mins.
6. Discard the flow-through 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.
7. Add 600 μ L of Wash Buffer 1 to the column and centrifuge at 12,000 rpm for 1 min.
8. Add 500 μ L of Wash Buffer 2 to the column and centrifuge at 12,000 rpm for 1 min to completely remove salts and impurities.
9. Transfer the purification column to a clean, sterile microfuge tube and add 30 μ L- 50 μ L of Elution Buffer or DNase/RNase-free water to the centre of the column.
10. Centrifuge the column at 12,000 rpm for 2 minutes.
11. Discard the purification column and store the eluted DNA at -20°C or -80°C until use.

FLOW DIAGRAM OF DNA EXTRACTION PROTOCOL



TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSES	SUGGESTED SOLUTIONS
Low DNA Yield	Sample input: Too much input.	Use less input material or increase the volume of the Lysis Buffer.
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	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 culture 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 overgrown or Old Cell Cultures	To prevent DNA degradation: Lyse fresh cultures into a Lysis Buffer. Collect and store the fresh Bacterial cultures in RNA WRAPR 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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