

CE IVDR

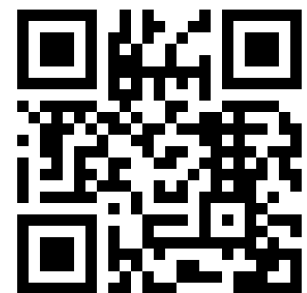
azooka



# AZUL FUNGAL DNA EXTRACTION KIT

DNA IN 60 MINS | GOOD YIELDS FOR USE IN PCR /SEQUENCING

## PRODUCT BROCHURE



Cat No-DE119

ISO 13485 CERTIFIED

## PRODUCT DESCRIPTION

AZUL Fungal DNA Extraction Kit is an easy and efficient system for the isolation of high-quality genomic DNA from fresh, frozen fungus. 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
Extraction Buffer	30mL	15mL
Lysis Buffer(LB)	3mL	2mL
Glass beads	200	100
Binding buffer(BB)	30mL	15mL
Wash Buffer (WB)	60mL	30mL
Elution Buffer(EB)	4mL	2mL
Spin Column	50 (Pouch pack)	25 (Pouch pack)

## SPECIFICATIONS

Format	Spin column
Sample type	Fresh, Frozen fungal samples.
Equipment	Microcentrifuge
Processing time	60 Mins
Sample amount	>50mg - Solid samples
Type	Total DNA
Sample storage	Eluted DNA should be stored at $\leq -20^{\circ}\text{C}$
Yield	5-30 $\mu\text{g}$
Purity	$A_{260}/A_{280} \geq 1.8 - 2$
Kit Storage	Room Temperature
Kit Validity	Viable for 1 year if stored at appropriate conditions

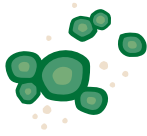
**NOTE:** Check the Extraction Buffer, Binding Buffer and Lysis Buffer for any salt precipitation before every use. Re-dissolve any precipitate by warming the solution to  $37^{\circ}\text{C}$ , then cool it back to room temperature before use.

## DNA EXTRACTION PROTOCOL

1. Collect and weigh >50 mg of fresh/frozen fungal samples or take >1ml of cells grown on a liquid media and transfer it to a clean 2ml microfuge tube and add 600µl of extraction buffer and 55µl of lysis buffer.
2. Add 3-4 glass beads and Vortex the tube for 11 minutes .
3. Transfer the lysate except the glass bead into fresh microfuge tube.
4. Centrifuge the sample at 15,000 rpm for 15 minutes at RT.
5. Transfer the supernatant to fresh microfuge tube and add 600µL of binding buffer and mix well.
6. Keep the tube for incubation for 15 minutes at -20°C.
7. Transfer the suspension to a spin column and centrifuge the tube at 15,000 rpm for 2 min at RT.
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 600µL Wash Buffer (WB) at 15,000 rpm for 1 min and discard the flow through to completely remove salts and impurities ( Repeat this step again).
10. Keep the purification column in a clean, sterile 1.5 mL microfuge tube and add 30µL- 50µL of Elution Buffer or DNase/RNase-free water to the center of the column.
11. Centrifuge the column for 15,000 rpm for 2 min.
12. Discard the purification column and store the eluted DNA at -20°C or -80°C until use.

## FLOW DIAGRAM OF DNA EXTRACTION PROTOCOL

Weigh  $\geq 50$  mg of tissue



Add 600 $\mu$ L Extraction Buffer + 55 $\mu$ L Lysis buffer


Glass beads

Vortex for 11 mins

Centrifuge at 15,000 rpm for 15 mins

Transfer clear supernatant to new tube

Add 600  $\mu$ L Binding Buffer

 Keep at  $-20^{\circ}\text{C}$  for 15 mins

Mix well  
Transfer lysate to Spin column

Centrifuge at 15,000 rpm for 2 mins

Repeat until complete lysate transfer

Add 600  $\mu$ L wash buffer

Centrifuge at 15,000 rpm for 1 min

Repeat this step

Add 30-50  $\mu$ L elution buffer

Centrifuge at 15,000 rpm for 2 mins

Eluted DNA

Store at  $-20^{\circ}\text{C}$  or  $-80^{\circ}\text{C}$  until use

## TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSES	SUGGESTED SOLUTIONS
Low DNA Yield	<b>Sample input:</b> Too much sample input or significantly less sample used	Use less input material or increase the volume of the Extraction Buffer and vortex thoroughly.  Use of $\geq 50$ mg of sample is recommended for good DNA yield.
	Incomplete Debris Removal or incomplete lysis/homogenization can cause debris to clog or overload the column and leech salts into DNA eluate.	Increase the volume of extraction Buffer to ensure complete homogenization. Be sure to centrifuge and pellet any debris and transfer the supernatant while avoiding any pellet debris.
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.
RNA Contamination	Too much sample used	<b>To remove RNA:</b> 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	Use of old samples	<b>To prevent DNA degradation:</b> Immediately collect and lyse fresh samples into a extraction Buffer.  Collect and store the fresh tissues 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:



## CONTACT US



hello@azooka.life



+91 8088747968



www.azooka.life



AZOOKALIFE



AZOOKA.LABS



AZOOKALIFESCIENCES



AZOOKALIFE



## RESEARCH CENTRE:

Society for Innovation and Development, Indian Institute of Science, Malleshwaram, Bengaluru, Karnataka, India- 560055

## MANUFACTURED AT:

# 1A, Kushal Garden Arcade, 'C' Block, 5th Floor, Peenya Industrial Area, 2nd Phase, Bengaluru, Karnataka, India- 560058