

Saphyr Site Preparation: User Supplied Material Checklist for Plant DNA Isolation Protocols

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Revision History

REVISION	NOTES
Α	Initial release.



Introduction

This checklist is intended to confirm that a customer looking to get trained on the Bionano Plant DNA Isolation workflows has all required and/or recommended user-supplied material and equipment. The wet lab contact at the site is required to go through the checklist and order/procure any outstanding items. Upon receipt of outstanding items, user is required to check the 'Present' box in each row corresponding to the relevant sample type/protocol and return the completed checklist to their Bionano Field Application Scientist.

Please note that new customer onsite training will be scheduled only upon the completion and submission of this signed form. Please list the wet lab contact(s), as well as any other contact(s) who will oversee this process to facilitate communication.

Please complete only the sections relevant to the type(s) of starting material(s) that you expect to be trained on. Should you have questions on a specific item(s) in the list, or on which sections you should complete, please contact your Bionano Field Application Scientist or support@bionano.com to discuss.

Site Details and Points of Contact

Institution name	Address	e-mail address & phone number

Point of Contact Dept.	Name	E-mail address



User Supplied Material and Equipment for Plant DNA Isolation Protocols

Common to all Bionano Plant DNA Isolation Protocols

Item	Supplier	Catalog	Item Present
Sample Hand	dling and Plug Lysis – Day 1		
Formaldehyde 36.5%-38% in H ₂ O	Sigma-Aldrich or equivalent	F8775	
Spermidine trihydrochloride	Sigma-Aldrich or equivalent	S2501, 85578 or 85580	
Spermine tetrahydrochloride	Sigma-Aldrich or equivalent	S1141, 85605 or S2876	
β-mercaptoethanol (βME)	Sigma-Aldrich or equivalent	M6250	
40 μm and 100 μm cell strainers	VWR or equivalent	21008-949 and 21008-950	
50 ml conical tube(s)	VWR or equivalent	21008-951	
15 ml conical tube(s)	VWR or equivalent	21008-918	
Petri dish (square, 12 x 12 cm)	Fisher or equivalent	12-565-224	
Razor blades	General Lab Supplier		
Plastic spatula	Corning catalog or equivalent	3005	
Small soft-bristled paint brush	General Supplier		
Heat blocks or water baths set to 43°C and 70°C*	General Lab Supplier		
Thermomixer C	Eppendorf or equivalent	5382000023	
50 ml SmartBlock	Eppendorf or equivalent	5365000028	
Proteinase K enzyme, Puregene, 5 ml	QIAGEN	158146	
RNase A solution, 5 ml	QIAGEN or equivalent	158156	
Green screened caps for 50 ml conicals	Bio-Rad or equivalent	1703711	
Agarose plug molds and plug mold plungers	Bio-Rad or equivalent	1703713	
Agarose, 2% CleanCut Low Melting Point	Bio-Rad or equivalent	1703594	
Filtered wide-bore pipette tip, 200 μl	VWR or Rainin equivalent	46620-642	
DNA	A Recovery – Day 2		
Metal spatula	VWR or equivalent	82027-530	
Orbital shaker, 12 in x 12 in Platform	Cole-Parmer or equivalent	EW-51820-30	
Agarase (0.5 unit/µl)	Thermo Fisher	EO0461	
0.1 µm Dialysis membrane, 47 mm diameter	Millipore or equivalent	VCWP04700	
Petri dish, 60 x 15 mm	VWR or equivalent	28384-092	
TE Buffer, pH 8.0	Thermo Fisher Scientific or equivalent	AM9849	
Non-filtered, beveled pipette tip, 200 μl	USA Scientific or equivalent	1111-1810	
DNA Quantification – Day 3			
Bath sonicator	VWR or equivalent	82027-530	



Vortexer			
Qubit Fluorometer 3.0	Thermo Fisher	Q33216	
Qubit BR Assay Kit	Thermo Fisher	Q32850	
Qubit Assay Tubes	Thermo Fisher	Q32856	

Plant Base Protocol

Item	Supplier	Catalog	Item Present
Rotor-stator homogenizer (+ disposable probes)	QIAGEN or equivalent	9001271 (990890)	
Refrigerated centrifuge + swinging bucket – 4500 x g	Eppendorf™ equipped with A- 4-44 Rotor or equivalent	5804R	
High-strength clear centrifuge tubes, 15-16 ml, closures and adapter sleeves (for density gradient centrifugation only)	Kimble® 45600-15 Glass Class B 15 ml Centrifuge Tubes + caps, Nalgene® 3117-0160 16 ml Polycarbonate Centrifuge Tubes with closure 18, VWR cat. # 21010-911 or equivalent; Kimble® 45550-15 Centrifuge Tube Rubber Adapter Sleeve		
Ice bucket and ice	General Lab Suplier		

Plant High Polysaccharide Protocol

Item	Supplier	Catalog	Item Present
Rotor-stator homogenizer (+ disposable probes)	QIAGEN or equivalent	9001271	
		(990890)	
Refrigerated Centrifuge	Eppendorf or equivalent	5804R	

Plant High Polyphenol Protocol

Item	Supplier	Catalog	Item Present
Rotor-stator homogenizer (+ disposable probes)	QIAGEN or equivalent	9001271 (990890)	
Refrigerated centrifuge + swinging bucket – 4500 x g	Eppendorf™ equipped with A-4-44 Rotor or equivalent	5804R	
High-strength clear centrifuge tubes, 15-16 ml, closures and adapter sleeves (for density gradient centrifugation only)	Kimble® 45600-15 Glass Class B 15 ml Centrifuge Tubes + caps, Nalgene® 3117-0160 16 ml Polycarbonate Centrifuge Tubes with		



closure 18, VWR cat. #	
21010-911 or equivalent;	
Kimble® 45550-15	
Centrifuge Tube Rubber	
Adapter Sleeve	

Liquid Nitrogen Protocol

Item	Supplier	Catalog	Item Present
Refrigerated centrifuge + swinging bucket – 4500 x g	Eppendorf™ equipped with A-4-44 Rotor or equivalent	5804R	
High-strength clear centrifuge tubes, 15-16 ml, closures and adapter sleeves (for density gradient centrifugation only)	Kimble® 45600-15 Glass Class B 15 ml Centrifuge Tubes + caps, Nalgene® 3117-0160 16 ml Polycarbonate Centrifuge Tubes with closure 18, VWR cat. # 21010-911 or equivalent; Kimble® 45550-15 Centrifuge Tube Rubber Adapter Sleeve		
Liquid Nitrogen	General Lab Supplier		
Mortar and Pestle	VWR or equivalent	89038-148 and 89038- 164	



Acknowledgement

By signing below, I declare that the information provided is accurate, in fact and form, to the best of my knowledge.

I understand that the success of the onsite training on the Bionano workflow depends on the possession of all required user-supplied material and equipment. .

Customer Representative name, job title (printed):
Signature:
Date:
Comments:
Bionano FAS name (printed):
Signature:
Date:
Comments:



Technical Assistance

For technical assistance, contact Bionano Genomics Technical Support.

You can retrieve documentation on Bionano products, SDS's, certificates of analysis, frequently asked questions, and other related documents from the Support website or by request through e-mail and telephone.

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Email	support@bionano.com	
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