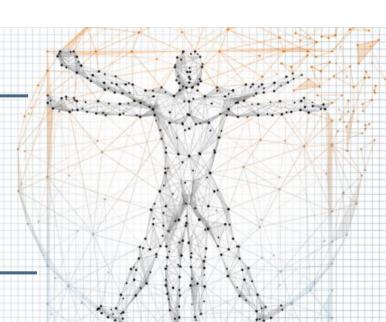




April 2023



Our Customer Guarantee

Thank you for considering Phase Genomics as your partner for your Hi-C project. Our mission is to ensure clients satisfaction by delivering the highest quality assemblies as quickly and affordable as possible.

Path to Success

By following the guidelines for sample inputs, draft assemblies, and Hi-C library data outlined in this document, clients will qualify for our **Customer Satisfaction Guarantee**, as outlined in our <u>Terms of Service</u>. Projects must meet the acceptable criteria to qualify for our **Guarantee**. Such projects are termed *Standard Projects*.

For Non-Standard Projects*, e.g. those involving a sample type not listed here, or those that do not meet assembly or sequencing requirements, partial payment will be requested upfront. Such projects do not qualify for our **Customer Satisfaction Guarantee**. If your project does not meet the below criteria, we are still happy to work with you. Please contact us at info@phasegenomics.com so we can collaboratively plan for the best outcome.

*Note: all cannabis projects are Non-Standard. Please inquire for more details.



ProxiMeta Hi-C Metagenome Deconvolution (Kit & Service)

Sample Inputs

Sample Complexity	Example	Minimum Input
High	>200 species/strains expected (e.g. soil sample)	> 20 g
Medium	20 – 200 species/strains expected (e.g. fecal sample)	> 200 µL
Low	<20 species/strains expected (e.g. culture)	> 200 µL
Cells	<20 species/strains expected	>1 M cells

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Sample Preservation

Preservation Method	Acceptable Preservation Conditions					
	Time in storage	Condition				
Fresh	<48 hours since harvest	- Sample is not noticeably degraded and has not been knowingly exposed to harsh conditions since harvest/collection				
	<48 hours since harvest	- Sample is not noticeably degraded and has				
Flash Frozen	stored at -80°C for <1 year	not been knowingly exposed to harsh conditions since harvest/collection Sample has been freeze-thawed <2 times				
PGShield™	< 1 month at room temperature					
(Phase Genomics)*	< 3 months at 4°C					
DAIAL . TM	< 1 month at 4°C					
RNAlater™ (ThermoFisher Scientific)**	< 1 week room temperature	- Sample is not noticeably degraded and has				
(Thermonium of the state of the	indefinitely at -20°C	not been knowingly exposed to harsh conditions since harvest/collection.				
	< 6 months at -80°C	- Samples were stored in storage solution				
Ethanol	< 1 month at room temperature	within 24 hours				
DALA /DALA CL: LITM	< 2 years room temperature					
DNA/RNA Shield™ (Zymo Research)**	< 2 years 4°C					
,	indefinitely at -20°C					
Crosslinked/Fixed	< 1 month at -20°C	<2% formaldehyde for 10 – 20 min and quenched with Tris or glycine				

^{*}Product is currently in beta testing so storage suggestions may change

^{**}Suggested storage times are based on manufacturer's recommendations for preserving nucleic acids and not specifically chromatin, so results may vary



Assembly Requirements

Assembly	Acceptable Assembly Parameters					
Input	Input Option	Hi-C Read Pairs				
Provide your own Assembly	>5 kb, by MegaHIT 1.1.2 or higher	>50 M				
Phase Genomics to Assemble	>100 M reads fro	>50 M				



Proximo Hi-C Kits and Genome Assembly

Sample Types

Organism	Acceptable Inputs							
Animal	Tissue (>250 mg)							
Plant	Leaf tissue (>250 mg)	Seedling tissue (>250 mg)	Flower tissue (>250 mg)					

Sample Preservation

Preservation Method	Acceptable Preservation Conditions						
Fresh		Still living 48 h prior to receipt					
Frozen	Flash frozen Stored at -80°C for Sample has been freeze-thawed <2 <1 year times						
Preserved	<1 month at room temperature	PGShield™ (Phase Genomics)		RNA <i>late</i> (ThermoFi Scientifi	sher	Ethanol	DNA/RNA Shield™ (Zymo Research)
Fixed Tissue	<2% formaldehyde for 10 – 20 min						



Assembly Requirements

Genome	Acceptable Assembly Parameters						
Size	Contig N50	Hi-C Read Pairs					
Small (<400 Mb)	>1.5 Mb	<400	>150 M				
Medium (401 – 1,500 Mb)	>5 Mb	<1,500	>200 M				
Large (1,501 – 3,500 Mb)	>5 Mb	<3,500	>250 M				

Proximo SV: Structural Variant Detection

Sample Inputs

Sample Type	Acceptable Inputs					
Tissue	>250 mg					
Blood	>0.5 mL					
Cells	>1 M cells					

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Sample Preservation

Preservation Method	Acceptable Preservation Conditions						
Fresh		Still living 48 h prior to receipt					
Frozen	Flash frozen Stored at -80°C for Sample has been freeze-thawed <2 <p><1 year</p>						
Preserved	<1 month at room temperature	PGShield™ (Phase Genomics)		RNA <i>late</i> (ThermoFi Scientif	isher	Ethanol	DNA/RNA Shield™ (Zymo Research)
Fixed Tissue	<2% formaldehyde for 10 – 20 min						

Assembly Requirements

Outroot	Acceptable Assembly Parameters					
Output	Acceptable Assembly	Hi-C Read Pairs				
TAD Calling	Must be a shromosome scale assembly	>500 M				
SV Calling	Must be a chromosome-scale assembly	>100 M				