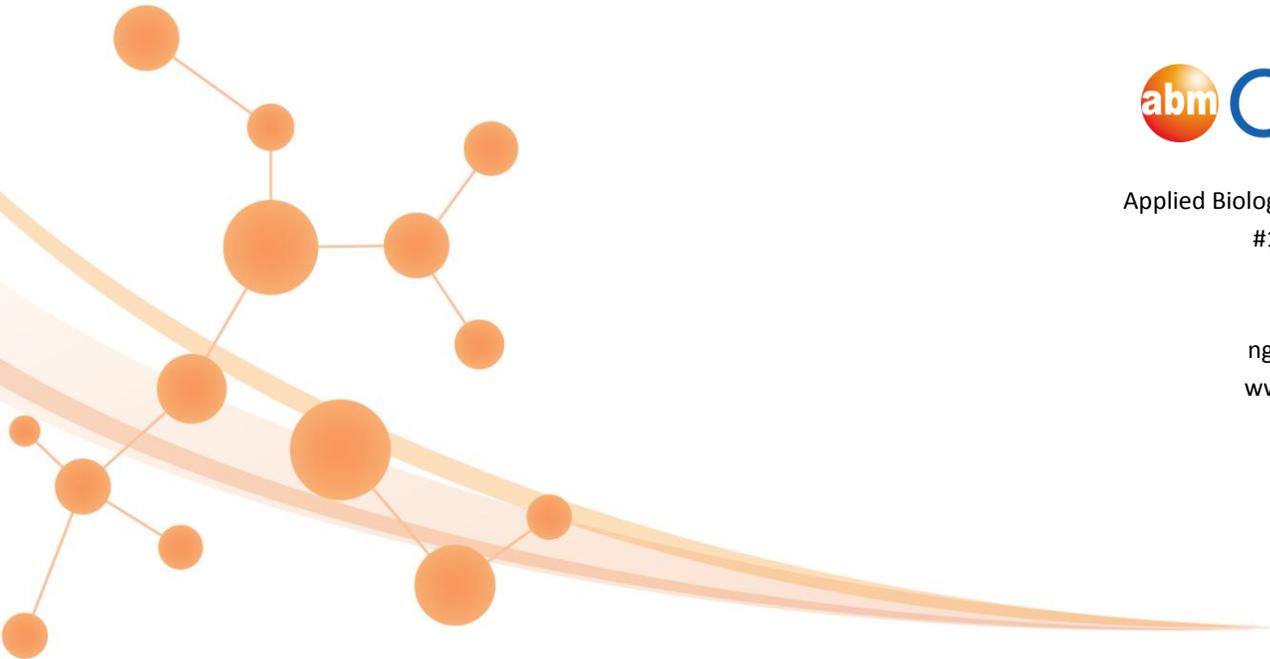


Sample Submission Guidelines

for Next Generation Sequencing Services



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Sample Submission Guidelines

Introduction

Thank you for choosing **abm** for your Next Generation Sequencing project! We strive to provide the best value and customer service, while delivering a complete, high-quality data set. This guide will provide you with the necessary information for submitting your samples for each of our NGS Services.

Please read this guide carefully before preparing your samples for shipment. When considering any of our NGS services, you will need to provide us with a completed sample submission form (as a printed copy shipped with your samples, and an electronic Excel file provided to ngs@abmgood.com and order@abmgood.com).

Always follow these guidelines for NGS projects:

- Place an order (and wait for your Order Confirmation email) before shipping any samples. Samples shipped without an Order Number will cause unnecessary delays for your project.
- Ensure samples are shipped as securely as possible, either taped down or secured in a rack and padded inside a protective box to avoid damage and/or cross-contamination between your samples.
- Clearly and adequately label your samples (we advise using adhesive labels).
- For samples that require dry ice, please ship with sufficient dry ice to ensure your samples arrive frozen, even if they experience a delay during shipment.
- Please reach out to our NGS team at ngs@abmgood.com if you have any questions.

For Standard DNA Samples for NGS

Service	Amount	Volume	Concentration	Storage Solution	Shipping Conditions
WGS for Bacteria	≥500ng	≥25μL	≥5ng/μL	Nuclease-free H ₂ O or 10 mM Tris-HCl pH 8.0	Ship at 4°C, with ice packs/blue ice
WGS for Eukaryotes	≥2μg	≥100Ll	≥20ng/μL		
Exome-Seq					
Amplicon-Seq					
rDNA Metagenomics Sequencing	≥500ng	≥25μL	≥5ng/μL		
Full-Length Plasmid Sequencing					

- If your samples are less than the amounts indicated above or you require DNA isolation, please contact ngs@abmgood.com and we can provide further assistance.
- DNA samples are required to have an OD A260/A280 ratio ≥ 1.8 and A260/230 ≥ 1.9.
- For WGS, we recommend RNase treatment prior to sample submission.
- Provided DNA must be non-degraded.
- Avoid repeated freeze-thaw cycles and store in nuclease-free centrifuge tubes to avoid fragmentation/degradation.

Sample Submission Guidelines

For Standard RNA Samples for NGS

Service	Amount	Volume	Concentration	Storage Solution	Shipping Conditions
RNA-Seq	≥2μg Total RNA	≥40μL	≥50ng/μL	RNase-free H ₂ O	Ship at -20°C, on dry ice
	>100ng of polyA-enriched mRNA	≥40μL	≥2.5ng/μL	RNase-free H ₂ O	
	>1,000,000 of cells*	1 vial	---	1X PBS or RNAlater	
	25-50mg of tissue*	---	---	---	
Low-Input RNA-Seq <small>This service includes Total RNA Isolation.</small>	25-100ng Total RNA	≥50μL	≥2ng/μL	RNase-free H ₂ O	
	>2500-10,000 of cells	---	---	1X PBS or RNAlater	
RNA-Seq for Degraded or FFPE Samples <small>This service includes Total RNA Isolation & rRNA Depletion Treatment</small>	≥2μg Total RNA	≥40μL	≥50ng/μL	RNase-free H ₂ O	
	Up to 10,000,000 cells	1 vial	---	1X PBS or RNAlater	
	Up to 30mg of tissue	---	---	---	
miRNA-Seq	≥2μg of Total RNA [#]	≥40μL	≥50ng/μL	RNase-free H ₂ O	
	>1,000,000 of cells*	1 vial	---	1X PBS or RNAlater	
	25-50mg of tissue*	---	---	---	

*A Total RNA Isolation fee will apply for this sample type, or if samples are provided in RNAlater. Please specify the sample type that will be provided prior to order placement to avoid delays in your project once we receive your samples.

[#]For miRNA sequencing services, please isolate your RNA sample with a mirVana™ miRNA Isolation Kit, mirVana™ PARIS™ Kit or PureLink® miRNA Isolation kit to enable adequate enrichment of your sample.

- If your samples are less than the amounts indicated above, please contact ngs@abmgood.com, as we may still be able to process your samples, depending on the circumstances.
- RNA samples are required to have an OD260/280 ratio between 1.8 and 2.0 and 260/230 ≥ 1.7.
- Store RNA samples at -80°C in sealed, nuclease-free tubes and ship with plenty of dry ice to ensure samples arrive frozen.
- Treat your samples with DNase to remove residual DNA, or this will negatively impact sequencing results.
- If providing fresh tissues/cell pellets, store in RNAlater according to the manufacturer's instructions, or flash-freeze immediately after harvest. Samples can be kept in RNAlater at room temperature for up to 1 week during shipping. If you have any other questions, please contact us or the supplier for more specific instructions.

Sample Submission Guidelines

For NGS Lane Rentals

Service	Info	Volume	Concentration	Storage Solution	Shipping Conditions
MiSeq	Index / Barcodes	20-50µL	5nM, based on qPCR	Nuclease-free H ₂ O, elution buffer, or low TE solution	Ship at 4°C, with ice packs/blue ice
NextSeq 500			15nM, based on qPCR		
HiSeq 4000					

- For all lane rentals, we will perform QC on your samples, including Qubit, Agilent Bioanalyzer, and qPCR, prior to sequencing, unless otherwise requested. If you choose to forgo this QC, the Sample and Library QC fee will be waived. If your samples fail QC (or you ask to forgo QC) and you choose to proceed with sequencing, the data will be provided as-is.
- If your samples are less than the amounts indicated above, please contact ngs@abmgood.com, as we may still be able to process your samples, depending on the circumstances.

For Special NGS Applications

Service	Amount	Volume	Concentration	Storage Solution	Shipping Conditions
CRISPR/Cas9 Targeted Amplicon-Seq	≥500ng gDNA	≥25µL	≥5ng/µL	Nuclease-free H ₂ O or 10 mM Tris-HCl pH 8.0	Ship at 4°C, with ice packs/blue ice
Disease Panels & Pathway Genes	Inquire	---	---	---	---
shRNA/sgRNA Deconvolution Screening	≥500ng gDNA	≥25µL	≥5ng/µL	Nuclease-free H ₂ O or 10 mM Tris-HCl pH 8.0	Ship at 4°C, with ice packs/blue ice
circRNA-Seq	≥2µg Total RNA	≥40µL	≥50ng/µL	RNase-free H ₂ O	Ship at -20°C, on dry ice
Lenti- & Retrovirus Integration Site-Seq	≥500ng, gDNA	≥25µL	≥5ng/µL	Nuclease-free H ₂ O or 10 mM Tris-HCl pH 8.0	Ship at 4°C, with ice packs/blue ice
Viral Genome-Seq	Inquire	---	---	---	Ship at -20°C, on dry ice
mtDNA-Seq	≥500ng mtDNA	≥25µL	≥5ng/µL	Nuclease-free H ₂ O or 10 mM Tris-HCl pH 8.0	Ship at 4°C, with ice packs/blue ice
	500k to 5,000,000 cells*	1 Vial	---	1X PBS	Ship at -20°C, on dry ice

* If cells are provided for a mtDNA-Seq Service, a mtDNA Isolation Fee will apply for each sample. Please specify if this is required for your project prior to order placement to avoid unnecessary delays.

- If your samples are less than the amounts indicated above, please contact ngs@abmgood.com, as we may still be able to process your samples, depending on the circumstances.