



RNA

EXTRACTION & SUBMISSION GUIDELINE



This handbook outlines the essential guidelines for submitting samples. Following these instructions will ensure a smooth process, timely analysis, and optimal results. This handbook is designed to be clear and concise, but if you have any questions after reviewing it, please don't hesitate to contact us.

We're here to help!

www.admerahealth.com
908-222-0533

126 Corporate Boulevard
South Plainfield NJ 07080
CLIA ID: 31D2038676

RNA Extraction Requirements

Sample Type	Storage Method	Quantity	Shipment
FFPE	Slides	5 slides at 10 µm / slide	Room Temperature
	Curls in Eppendorf tubes	2-4 curls/tube	
	Blocks for cutting	1 block/sample	
Cultured Cells	Cells in resuspended Buffer LT Plus prepared with β-mercaptoethanol	>50k cells	Dry ice
	Cells resuspended in RNAprotect Cell Reagent	*If sending >500k cells, please send in lysis buffer or pelleted	
Tissue	Snap-frozen pellet		Dry Ice
	Tissue resuspended in RNAprotect Tissue Reagent	>30 mg	
Blood (animal)	Snap-frozen		Dry Ice
	RNAprotect Animal Blood Tubes	2 tubes/sample	
Blood (human)	Snap-frozen		Dry Ice
	Frozen blood in PAXgene tube	2 tubes/sample	
Plasma & Serum	Snap-frozen		Dry Ice
	Frozen in 1.5 ml Eppendorf tube	400 µl/sample	
Exosome	Snap-frozen		Dry Ice
	Exosome resuspended in 1x PBS	50 µl	

RNA Extraction Requirements

Sample Type	Storage Method	Quantity	Shipment
	Whole sample recommended for processing	1 ml bodily fluids	
	Snap-frozen pellet		
Bacteria	In growth media		Dry Ice
	Resuspended in RNAProtect Bacteria Reagent	5-7.5 x 10 ⁸ cells	
Plant cells, tissue, & filamentous fungi	Snap-frozen (prefer lyophilized) plant tissue	100-200 mg	Dry Ice
	3-4 x 10 ⁶ plant or fungal cells	2 tubes/sample	
	Host RNA: follow regular tissue guidelines	>30 mg	
Stool & gut material	Microbial RNA: snap-frozen stool of gut material	50-200 mg stool or tissue	Dry Ice
	Microbial: OMNIgene GUT DNA and RNA	1 tube/sample	

Please submit a Sample Safety Consent Form

Dual Extraction Requirements

Sample Type	Storage Method	Quantity	Shipment
	Slides	5 slides at 10 µm per slide	
FFPE	Curls in Eppendorf tubes	2-4 curls/tube 2 tubes/sample	Room Temperature or Wet Ice
	Blocks for cutting	1 block/sample	
Cultured Cells	Cells resuspended in RNAProtect Cell Reagent	>50K cells	Dry Ice
Tissue	Tissue Resuspended in RNAProtect Tissue Reagent	>30mg	Dry Ice
	Snap-frozen		
Blood			
Plasma & Serum		Requires separate submissions	
Saliva & Buccal Swabs	Microbial: Zymo Swab preservation kits	2 tubes/sample	Dry Ice
Stool	OMNIgene GUT DNA and RNA	1 tube/sample	Dry Ice
Bacteria		Requires separate submissions	

Dual Extraction Requirements

Sample Type	Storage Method	Quantity	Shipment
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Plants & Fungus

Please submit a [Sample Safety Consent Form](#)

RNA Sample Preparation Guidelines

Sample Type	Protocol	Volume	Quantity	Concentration	Quality	Buffer Shipment Method
mRNA-seq	Standard Input		Recommended: 1ug Minimum: 200ng	Recommended: >10 ng/μl Minimum: >5 ng/μl		
	Ultra-low Input				RIN > 7	
	3' Tag seq	20μl	Recommended: 20 ng Minimum: 20 pg	Recommended: >1 ng/μl Minimum: >1 pg./μl		RNase-free water; Ship with dry ice All RNA samples must be RNase-free
	Standard Input		Recommended: 1 ug Minimum: 2 ng	Recommended: >50 ng/μl Minimum: >0.2 ng/μl	Recommended: DV200 > 50% Acceptable DV200 30%-50%	

RNA Sample Preparation Guidelines

Sample Type	Protocol	Volume	Quantity	Concentration	Quality	Buffer Shipment Method
Total RNA-seq	Ultra-low Input	20µl [‡]	Recommended: 1 ug Minimum: 200 ng	Recommended: >50 ng/µl Minimum: >10 ng/µl	Recommended: DV200 > 50% Acceptable DV200 30%-50%	RNase-free water; Ship with dry ice All RNA samples must be RNase-free
	Standard Input		Recommended: 20 ng Minimum: 500 pg	Recommended: >1 ng/µl Minimum: >0.04 ng ng/µl		
smRNA-seq	Ultra-low Input	20µl [‡]	Recommended: 1 ug Minimum: 200 ng	Recommended: >100 ng/µl Minimum: >20 ng/µl	RIN > 7	RNase-free water; Ship with dry ice All RNA samples must be RNase-free
			Recommended: 20 ng Minimum: 2 ng	Recommended: >2 ng/µl Minimum: >0.2 ng/µl		

[‡]If less than minimum volume, our team will volume up to 15µl

RNA Sample Preparation Guidelines – PacBio Iso-Seq

Service	Amount	Volume	Concentration	Purity	Fragment Size
Iso-seq	Recommended: 1-2ug Minimum: 500ng	>20µL	Recommended: >45ng/ µL	Recommended: OD260/OD280: 1.8-2 Minimum: OD260/230:2-2.2	RIN>7

RNA Cell Sample Preparation Guide

Sample Type	Library Preparation	Quantity	Buffer Shipment Method	Notes
Cell	mRNA-seq	1-1000 cells	PSS Buffer; Refer to the guideline here ; Dry Ice	Library preparation directly from cells
	Total RNA-seq	10-1000 cells	PBS; Refer to guideline here ; Dry Ice	**If extraction is needed, refer to Extraction Submission Guidelines Cells/Cell Pellet for RNA/DNA Extraction

Please send cells to arrive between Monday and Wednesday
1-week advance notice on project arrivals is required.

Please submit a Sample Safety Consent Form

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126 Corporate Blvd
South Plainfield NJ 07080
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RNA Shipping Instructions

Ship samples to:

Attention: **Admera Health Quote #**
 Admera Health, LLC
 126 Corporate Blvd
 South Plainfield, NJ 07080
 Phone +1-908-222-0533
 Email custom-services@admerahealth.com

Samples must arrive **Monday–Friday only**. Do NOT ship on days that would result in weekend arrival.

Shipping Instructions Checklist

Step 1. Submit required documents (at least 24 hours before shipping)

- Complete the online **Sample Information Form**
- Fresh/Frozen samples (BSL-2): Complete Sample Safety Consent Form** and submit electronically to custom-services@admerahealth.com

Step 2. Label Your Samples

- Write the tube/sample ID on the top of each tube.** Confirm it matches what you submitted electronically.
- Keep IDs **short and simple**, less than 8 characters with letters and numbers only
- Take a photo** of all labeled samples before packing.

Step 3. Pack Your Shipment

Packaging (choose the right container):

- Review examples in Packaging Recommendations

Documents & package markings:

- Include a copy of your **Admera Health Quote #** in the package.
- Mark the outside with the **Project ID** and **Service Type**.
- Include the required **Shipping Note** inside AND outside the package for these project types:
 - **Extraction** —RNA Extraction slip [here](#)

Temperature & cold chain:

- Follow the temperature requirements for your sample type:
 - **Dry ice shipments** → include at least **5 lbs of dry ice per transit day**; affix a Dry Ice label to the outside

Step 4. Ship Your Package

- Confirm the **Admera Health Quote #** appears on the shipping label.

Step 5. Notify Admera After Shipping

- Email the **tracking number** and **sample photos** to custom-services@admerahealth.com.

Packaging Recommendations

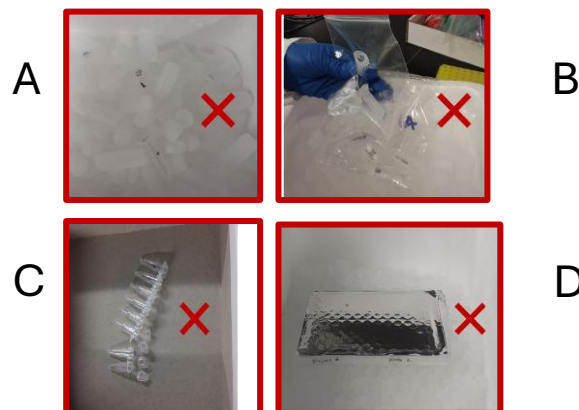
Recommended (do these things)

- **Label the top** of every tube with its sample ID.
- **≤5 1.5mL tubes:** place inside a 50 mL centrifuge tube. **See picture 1.**
- **>5 1.5mL tubes:** use a sturdy cardboard box. **See picture 2.**
- **Plates:** always use a plate rack. **See picture 3.**



Not Recommended (avoid these common mistakes)

- Placing sample tubes directly in ice or dry ice without a secondary container. **See picture A.**
- Putting samples in a plastic bag and placing that directly in dry ice — bags crack at low temperatures. **See picture B.**
- Packing strip tubes directly on ice or dry ice. **See picture C.** Shipping plates without a rack — they can break in transit. **See picture D.**



Please print & ship this notice with your RNA submission:

Shipping Note

RNA Extraction Samples

Please direct packages to our extraction team for accessioning!