



Sample Submission Guidelines

Sample Preparation and Packaging

1. Review the sample submission guidelines before preparing your samples. Ensure that sample volume, concentration, quality, and other requirements are met to avoid delays in turnaround time.
2. Ensure all caps are fully tightened. Wrap each tube with parafilm to prevent leakage and contamination during transport.
3. Consider using secondary containers (e.g. falcon tubes, bubble wrap) to provide an extra layer of protection against spills or leaks.

Sample Labeling

1. Clearly label each container with a clear, unique identifier that matches the submission form.
2. Do not rely solely on adhesive labels. These labels may detach on dry ice. Use a waterproof, chemical-resistant marker for labeling to ensure legibility.

Sample Submission Forms

1. Complete the sample submission form provided by AmpSeq. Include all necessary details, such as customer information, sample IDs, storage buffer, and other project specifics.
2. Email an e-copy in Excel format to order@ampseq.com before submitting your samples.
3. Include a printed copy of the completed sample submission form with your shipment.

Shipping and Pickups

1. Use appropriate packaging with cold packs or dry ice as specified in the submission guidelines for each sample type.
2. If shipping with dry ice, include a sufficient amount to ensure the samples remain frozen, even in the event of carrier delays.
3. Ship your samples to:

AmpSeq LLC	AmpSeq LLC
ATTN: Sample Receiving	ATTN: Sample Receiving
401 Professional Dr, Suite 120	750 Main Street
Gaithersburg, MD 20879	Cambridge, MA 02139
Tel: (240) 654-6236	Tel: (240) 654-6236
4. To schedule a sample pickup, email order@ampseq.com with your pickup location and contact information. For pickup eligibility, contact order@ampseq.com or (240) 654-6236.
5. After shipping, notify order@ampseq.com and provide the tracking number to facilitate receipt and processing.
6. If you have any questions, please contact info@ampseq.com or (240) 654-6236.



Sample Submission Guidelines

AmpX – Express Amplicon Sequencing

Sample Type	Purified PCR Product
Insert Size	150-600 bp
Recommended Volume	20 µL
Recommended Concentration	5-20 ng/µL (normalized)
Illumina Adapter Sequences	For the forward sequencing read: 5'-TCCCTACACGACGCTCTTCCGATCTnnnnnn-3' For the reverse sequencing read: 5'-GTTTCAGACGTGTGCTCTTCCGATCTnnnnnn-3'

RNA-Seq

mRNA-Seq / Small RNA-Seq

Total RNA-Seq

Recommended Quantity	1 µg (200 ng minimum)	1 µg (200 ng minimum)
Recommended Concentration	>10 ng/µL	>50 ng/µL
Recommended Volume	>20 µL	>20 µL
Quality	RIN ≥ 7	RIN ≥ 7
Buffer	RNase-free water	RNase-free water
Shipment	Ship frozen on dry ice	Ship frozen on dry ice

* RNA extraction service available

Whole Genome Sequencing

Recommended Quantity	1 µg (1 ng minimum)
Recommended Concentration	>10 ng/µL
Recommended Volume	>20 µL
Quality	A260/280 1.8-2.0
Buffer	Water
Shipment	Ship with ice packs

* DNA extraction service available

Sequencing Only (for pre-made libraries)

Recommended Concentration	>10nM (5nM minimum)
Recommended Volume	20 µL
Sample Type	Final libraries
Shipment	Ship with ice packs

* Pooling and additional QC services available

We recommend using Qubit for concentration measurements. If your samples do not meet our recommended requirements, or if you do not see your sequencing type, please contact us at info@ampseq.com or (240) 654-6236. Our NGS team will evaluate your case and provide guidance on the best approach.

RNA Sample Preparation Guidelines				
Sample Type	Minimum Requirement	Recommended Quantity	Sample Storage	Shipping Requirement
Tissue	10 mg/sample	10-30 mg/sample	TRI Reagent (TRIzol) ¹ DNA/RNA Shield ² RNAlater ³ RLT Buffer Snap-Freeze	Dry Ice
Cells⁴	10 ⁵ cells	10 ⁵ -10 ⁶ cells	TRI Reagent (TRIzol) ¹ DNA/RNA Shield ² RLT Buffer Snap-frozen cell pellets	
Plasma	100 µL/sample	100-200 µL/sample	Snap-freeze in 1.5 mL Eppendorf tubes	
Blood	500 µL/sample; 2.5 mL if using PAXgene Tubes ⁵	1-2 mL/sample; 2-3 mL if using PAXgene Tubes ⁵	Snap-Freeze	
Stool and Soil	100 mg/sample	100-250 mg/sample	Snap-Freeze DNA/RNA Shield ² RNAlater ³ RLT Buffer	
Plant Tissue/Powder	100 mg/sample	100-150 mg/sample	Snap-Freeze DNA/RNA Shield ² RNAlater ³ RLT Buffer	

If your samples do not meet our minimum requirements or if you need further assistance, please contact info@ampseq.com or (240) 654-6236.

- For sample preparation using TRIzol:
 - Tissue: Homogenize in TRIzol at 15-30 mg of tissue per 1mL TRIzol.
 - Cells: Resuspend ~1x10⁷ cells in 1mL TRIzol.
 - For detailed instructions, see the [TRIzol Reagent Protocol](#).
- According to Zymo Research, DNA/RNA Shield preserves nucleic acids at ambient temperature, eliminating the need for cold-chain storage or dry ice during shipping and storage. For detailed sample preparation instructions, please refer to the official [DNA/RNA Shield Protocol](#).
- For sample preparation using RNAlater, follow the [RNAlater Protocol](#).
- A total cell count (or estimated count) for each sample must be provided at submission.
- Please keep the PAXgene tubes at room temperature for at least 2 hours after collection to ensure proper stabilization. If delivered within 5 days, ship with ice packs; otherwise store at -80 °C and ship on dry ice.



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Gaithersburg, MD 20879
(240) 654-6236

DNA Sample Preparation Guidelines

Sample Type	Minimum Requirement	Recommended Quantity	Sample Storage	Shipping Requirement
Bacteria Yeast	Bacteria: 10^8 Yeast: 10^7	Bacteria: 10^8 - 10^9 Yeast: 10^7 - 10^8	DNA/RNA Shield ¹ Flash-frozen pellets	Dry Ice or Ice Packs (if suspended in DNA/RNA Shield) <i>**DO NOT FREEZE if submitted in liquid culture or as plate colonies; ship with ice packs.**</i>
Soil	50 mg	100-200 mg	DNA/RNA Shield ¹ Snap-Freeze	Dry Ice or Ice Packs (if stored or suspended in DNA/RNA Shield)
Stool	50 mg	100-150 mg	Snap-Freeze; DNA/RNA Shield Fecal Collection Tubes ²	
Swab	1 tube/sample	1-2 tubes/sample	Snap-Freeze; DNA/RNA Shield Collection Tubes w/ Swab ³	
Filter Paper	1 piece/sample	1-2 pieces/sample	DNA/RNA Shield ¹ Snap-Freeze	
Cells	10^5	10^5 - 10^6	DNA/RNA Shield ¹ Snap-Freeze	
Bones	100 mg	100-200 mg	DNA/RNA Shield ¹ Snap-Freeze	
Blood	200 μ L	200-500 μ L	Snap-Freeze in EDTA Tubes DNA/RNA Shield ¹	
Hair, Nails, Feather	10 mg	20-40 mg	Raw sample	
FFPE	1 slice/sample (~20mm ²)	1-2 slices/sample (~20-40mm ²)	Raw Sample	Room Temperature

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please contact info@ampseq.com or (240) 654-6236.

1. According to Zymo Research, DNA/RNA Shield preserves nucleic acids at ambient temperature, eliminating the need for cold-chain storage or dry ice during shipping and storage. For detailed sample preparation instructions, please refer to the official [DNA/RNA Shield Protocol](#).
2. For more detailed instructions, see [DNA/RNA Shield™ Fecal Collection Tube](#).
3. For more detailed instructions, see [Zymo DNA/RNA Shield™ Collection Tube w/ Swab](#).