

### 1. Sample Identification

- Label each sample clearly with a unique identifier
- Include product name, batch/lot number, concentration (if applicable), and date of sampling
- For complex samples (e.g., nanoparticles, drug delivery systems), specify the composition

### 2. Sample Quantity (may vary according to the requested analytical characterization method)

- Biotherapeutics/mAbs/Proteins: Minimum 1 mL for liquid or 100 mg for lyophilized samples
- Lipid Nanoparticles/Nanoparticles: Minimum 2 mL of suspension
- Small Molecules: Minimum 10 mg of pure compound
- Peptides: Minimum 5 mg of lyophilized powder
- Viral Vectors: Minimum  $1 \times 10^{10}$  viral particles
- Non-viral Drug Delivery Systems: Minimum 2 mL of formulation
- For specialized tests, consult our team for specific quantity requirements

### 3. Sample Containers

- Use sterile, inert containers appropriate for your sample type
- For proteins and antibodies, use low protein-binding tubes
- For nanoparticles and lipid formulations, use glass vials or specialized polymer containers
- Ensure containers are sealed tightly to prevent contamination or leakage

### 4. Storage and Shipping Conditions

- Maintain appropriate temperature conditions throughout storage and shipping:
  - Room temperature for stable small molecules
  - 2-8°C for most proteins, antibodies, and nanoparticle formulations
  - -20°C or -80°C for sensitive biologics or viral vectors
- Use temperature-controlled packaging (e.g., dry ice, gel packs)
- Include temperature monitoring devices for temperature-sensitive products

### 5. Documentation

- Complete the Sample Submission Form with all relevant details
- Include Certificate of Analysis (CoA) if available



- Provide Safety Data Sheets (SDS) for all materials
- For novel compounds or formulations, include any available characterization data

### 6. Special Handling Instructions

- For viral vectors or potentially biohazardous materials, clearly mark as "BIOHAZARD"
- For light-sensitive samples, use amber containers and mark "PROTECT FROM LIGHT"
- For hygroscopic samples, use moisture-resistant packaging

### 7. Shipping

- Use a courier service experienced in handling various types of research materials
- Ensure packaging complies with IATA regulations for your specific sample type
- For international shipments, include all necessary customs documentation

### 8. Notification

- Inform TechnoPharmaSphere of the shipment details, tracking number, and expected delivery date
- Provide emergency contact information for time-sensitive samples

### 9. Sample Stability

- Include information on sample stability and any specific handling requirements
- Specify if samples need to be processed within a certain timeframe upon receipt

### 10. Additional Considerations

- For lipid nanoparticles and drug delivery systems, specify the encapsulated drug or payload
- For conjugated molecules (e.g., antibody-drug conjugates), provide details on both components
- For viral vectors, include information on the viral type and any genetic modifications

**SPECIAL NOTE: For specific inquiries or additional guidance, please contact our technical support team specializing in your particular sample type or analytical need. These instructions are designed to maintain the integrity and quality of a wide range of sample types during transit to our partner laboratories, ensuring the highest quality analytical results for our clients at TechnoPharmaSphere Biopharma CRO.**

**Thank you for your cooperation!**

