Discovery Life Sciences Genomics Sample Submission Requirements

All sample shipments will require a clearly defined manifest including Protocol/Study identification, sample information, patient ID (if available), and contact information for shipper to rectify missing and/or ambiguous

Any shipments missing this critical information will be put into quarantine and will experience extended turnaround times.

Scope of Work (SOW) and/or Purchase Order (PO) must be completed prior to arrangement of any sample shipments. Shipments received prior to receipt of proper information will be quarantined and may be returned to sender if needed information and official documentation is not received in a timely manner. It is suggested that project kick-off discussion be conducted prior to shipment of any samples to ensure alignment with the laboratory activities upon receipt of samples.

An Analytical Plan will be compiled to detail laboratory activities and ensure client alignment prior to any sample processing. This document will be shared with the client for edits/comments. The DLS quality standards require that the Analytical Plan is agreed upon and signed off by DLS and client.

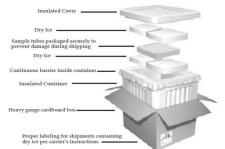
NOTE: Some projects may not require formal Analytical Plan if deemed out of scope for the nature of the project at DLS's discretion. This will be discussed with your Project Manager during the project initiation of each project.

	eacn project.				
S. No.	Sample Type Volume	Downstream Assay	Compatible tubes	Volume/Amount Required	Shipping Conditions
1	Blood	DNA	EDTA Aliquots or Blood Spot Punches: 2mL Sarstedt Tubes (Fisher Scientific, Cat# NCO418367)	0.5ml-10.0ml	RT, or Ice Pack or Dry ice. Overnight Shipment only.
		RNA	Paxgene RNA (PreAnalytix, Cat# 762165)	Manufacturer's recommendation (~2.5ml Whole Blood)	Dry ice. Overnight Shipment only.
		Dual DNA-RNA	Paxgene RNA (PreAnalytix, Cat# 762165)	Manufacturer's recommendation (~2.5ml Whole Blood)	Dry ice. Overnight Shipment only.
		Animal RNA	RNA protect Animal Blood Tubes (Qiagen, Cat # 76544)	Manufacturer's recommendation (~100ul Whole Blood)	Dry ice. Overnight Shipment only.
2	Buffy coat	DNA	2mL Lo-Bind Eppendorf Tubes (Eppendorf, Cat# 22431048) 2mL Sarstedt Tubes (Fisher Scientific, Cat# NC0418367)	250ul-1ml	Dry ice. Overnight Shipment only.
3	Plasma/Serum	miRNA	2mL Lo-Bind Eppendorf Tubes (Eppendorf, Cat# 22431048) 2mL Sarstedt Tubes (Fisher Scientific, Cat# NC0418367)	250ul-1ml	Dry ice. Overnight Shipment only.
4	Plasma	ctDNA	ZmL Lo-Bind Eppendorf Tubes (Eppendorf, Cat# 22431048) 2mL Sarstedt Tubes (Fisher Scientific, Cat# NC0418367) 15 ml Conical centrifuge tube – Corning, Falcon or any other comparable vendor.	1mL – 6mL	Dry ice. Overnight Shipment only.
	Cells	DNA	2mL Lo-Bind Eppendorf Tubes (Eppendorf, Cat# 22431048) 2mL Sarstedt Tubes (Fisher Scientific, Cat# NC0418367)	1-5Million	Dry Ice either in RNALater or Snap Frozen Pellets. If the cells are in a suspension, provide the lab with the catalog number of the buffer used. Overnight Shipment only.
5		RNA	2mL Lo-Bind Eppendorf Tubes (Eppendorf, Cat# 22431048) 2mL Sarstedt Tubes (Fisher Scientific, Cat# NC0418367)	1-5Million	Dry Ice either in RNALater or Snap Frozen Pellets. If the cells are in a suspension, provide the lab with the catalog number of the buffer used. Overnight Shipment only.
		Dual DNA-RNA	2mL Lo-Bind Eppendorf Tubes (Eppendorf, Cat# 22431048) 2mL Sarstedt Tubes (Fisher Scientific, Cat# NC0418367)	5-10Million	Dry Ice either in RNALater or Snap Frozen Pellets. If the cells are in a suspension, provide the lab with the catalog number of the buffer used. Overnight Shipment only.
	Tissue	DNA	2mL Lo-Bind Eppendorf Tubes (Eppendorf, Cat# 22431048) 2mL Sarstedt Tubes (Fisher Scientific, Cat# NC0418367)	20-30mg	Dry Ice either in RNALater or Snap Frozen Pellets. If the cells are in a suspension, provide the lab with the catalog number of the buffer used. Overnight Shipment only.
6		RNA	2mL Lo-Bind Eppendorf Tubes (Eppendorf, Cat# 22431048) 2mL Sarstedt Tubes (Fisher Scientific, Cat# NC0418367)	20-30mg	Dry Ice either in RNALater or Snap Frozen Pellets. If the cells are in a suspension, provide the lab with the catalog number of the buffer used. Overnight Shipment only.
		Dual DNA-RNA	2mL Lo-Bind Eppendorf Tubes (Eppendorf, Cat# 22431048) 2mL Sarstedt Tubes (Fisher Scientific, Cat# NC0418367)	40-50mg	Dry Ice either in RNALater or Snap Frozen Pellets. If the cells are in a suspension, provide the lab with the catalog number of the buffer used. Overnight Shipment only.
7	Saliva	DNA	Oragene 500 Kit following manufacturer's guidelines (DNA Genotek, Cat# OGD-500).	Manufacturer's recommendation	Manufacturer's recommendation
8	Buccal Swab	DNA	iSWAB™-DNA-1200 (https://mawidna.com/mawi-product/iswab-dna- 1200/)	Manufacturer's recommendation	Manufacturer's recommendation
9	Stool	DNA	OMNIgene Gut Kit following manufacturer's guidelines (DNA Genotek, Cat# OMR-200).	Manufacturer's recommendation	Manufacturer's recommendation
	FFPE	DNA	2mL Lo-Bind Eppendorf Tubes (Eppendorf, Cat# 22431048) 2mL Sarstedt Tubes (Fisher Scientific, Cat# NC0418367)	Slides: 10 Slides per patient Section: 3 sections of 10 micron thickness Cores: 1-2 punches, 1-2mm diameter	FFPE Samples Submission Criteria: Trim excess paraffin from the FFPE block using a scalpel. Tumor rich region should be >50%, necrosis < 20%, nucleated cells cellularity > 80%. Will not accept specimens fixed/processed in heavy metal fixatives, zinc formalin, or any other alternative fixative other than 10% neutral buffer formalin. For FFPE Sildes a reference H&E stained slide is recommended. All FFPE samples should always be shipped at RT or with Ice Packs, NEVER USE DRY ICE to ship any FFPE sample.
10		RNA	2mL Lo-Bind Eppendorf Tubes (Eppendorf, Cat# 22431048) 2mL Sarstedt Tubes (Fisher Scientific, Cat# NC0418367)	Slides: 10 Slides per patient Section: 3 sections of 10 micron thickness Cores: 1-2 punches, 1-2mm diameter	FFPE Samples Submission Criteria: Trim excess paraffin from the FFPE block using a scalpel. Tumor rich region should be >50%, necrosis < 20%, nucleated cells cellularity > 80%. Will not accept specimens fixed/processed in heavy metal fixatives, zinc formalin, or any other alternative fixative other than 10% neutral buffer formalin. For FFPE Slides a reference H&E stained slide is recommended. All FFPE samples should always be shipped at RT or with Ice Packs, NEVER USE DRY ICE to ship any FFPE sample. Overnight Shipment only
		Dual DNA-RNA	2mL Lo-Bind Eppendorf Tubes (Eppendorf, Cat# 22431048) 2mL Sarstedt Tubes (Fisher Scientific, Cat# NC0418367)	Slides: 10 Slides per patient Section: 3 sections of 10 micron thickness Cores: 2-3 punches, 1-2mm diameter	FFPE Samples Submission Criteria: Trim excess paraffin from the FFPE block using a scalpel. Tumor rich region should be >50%, necrosis < 20%, nucleated cells cellularity > 80%. Will not accept specimens fixed/processed in heavy metal fixatives, zinc formalin, or any other alternative fixative other than 10% neutral buffer formalin. For FFPE Slides a reference H&E stained slide is recommended. All FFPE samples should always be shipped at RT or with Ice Packs, NEVER USE DRY ICE to ship any FFPE sample. Overnight shipment only.

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S. No.	Sample Type Volume	Downstream Assay	Compatible tubes	Volume/Amount Required	Shipping Conditions
11	Pre-extracted DNA	DNA	1. Samples should be submitted in either tubes (up to 10 samples or less) or polypropylene PCR plates (10 samples or more). 2. If submitting in tubes, write the sample number listed on your order sheet on the top of each tube. Other identifiers may be written on the side. 3. Recommended tubes: 1.5mL Lo-Bind Eppendorf Tubes (Eppendorf, Cat# 022431021), or 2mL Lo-Bind Eppendorf Tubes (Eppendorf, Cat# 22431048) 4. Plates should have the project number and sample number range clearly marked on the top foil and plate sides, and should be sealed firmly with a foil plate seal capable of withstanding -80 C temperatures. 5. Samples in plates should be submitted starting in well A1 either by rows or columns in sequential wells with no empty or skipped wells between samples. 6. Recommended plate: SuperPlate PCR Plate, 96-well, semi-skirted (Thermo Scientific, Cat# BC-2400). 7. Recommended foil plate seal: Microplate Aluminum Sealing Tape (Corning, Cat# 6569). 8. Any plate submitted must be CLEAR and semi-skirted or full-skirted. NO deep well, round-bottom, or flat-bottom plates.	Assay dependant, please inquire.	Dry ice. Overnight Shipment only.
12	Pre-extracted RNA	RNA	1. Sampies should be submitted in either tubes (up to 10 samples or less) or polypropylene PCR plates (10 samples or more). 2. If submitting in tubes, write the sample number listed on your order sheet on the top of each tube. Other identifiers may be written on the side. 3. Recommended tubes: 1.5mL Lo-Bind Eppendorf Tubes (Eppendorf, Cat# 22431048) 4. Plates should have the project number and sample number range clearly marked on the top foil and plate sides, and should be sealed firmly with a foil plate seal capable of withstanding -80 C temperatures. 5. Samples in plates should be submitted starting in well A1 either by rows or columns in sequential wells with no empty or skipped wells between samples. 6. Recommended plate: SuperPlate PCR Plate, 96-well, semi-skirted (Thermo Scientific, Cat# 8C-2400). 7. Recommended foil plate seal: Microplate Aluminum Sealing Tape (Corning, Cat# 6569). 8. Any plate submitted must be CLEAR and semi-skirted or full-skirted. NO deep well, round-bottom, or flat-bottom plates.	Assay dependant, please inquire.	Dry ice. Overnight Shipment only.
13	Sequencing Ready Libs	Sequencing	1. Samples should be submitted in either tubes (up to 10 samples or less) or polypropylene PCR plates (10 samples or more). 2. If submitting in tubes, write the sample number listed on your order sheet on the top of each tube. Other identifiers may be written on the side. 3. Recommended tubes: 1.5mL Lo-Bind Eppendorf Tubes (Eppendorf, Cat# 022431021), or 2mL Lo-Bind Eppendorf Tubes (Eppendorf, Cat# 22431048) 4. Plates should have the project number and sample number range clearly marked on the top foil and plate sides, and should be sealed firmly with a foil plate seal capable of withstanding -80 C temperatures. 5. Samples in plates should be submitted starting in well A1 either by rows or columns in sequential wells with no empty or skipped wells between samples. 6. Recommended plate: SuperPlate PCR Plate, 96-well, semi-skirted (Thermo Scientific, Cat# BC-2400). 7. Recommended foil plate seal: Microplate Aluminum Sealing Tape (Corning, Cat# 6569). 8. Any plate submitted must be CLEAR and semi-skirted or full-skirted. NO	Assay dependant, please inquire.	Dry ice. Overnight Shipment only.
	HMW DNA		deen well_round-hottom_or flat-hottom plates		Ideally icepacks. Concern is freeze thaw during shipping.

Sample Shipping Recommendations



Shipping Address Discovery Life Science Attn: Genomics Services 900 Hudson Way Huntsville, AL 35806

Contact Information: 866.838.2798 Menu Option 6 email: info@dls.com