STANDARD OPERATING PROCEDURE

Laboratory Sample Receiving SOP

Document no.	SOP-LAB-001
Revision	1.0
Owner	Laboratory Manager
Effective date	September 15, 2026
Review cycle	Every 12 months

1. Purpose

To ensure every sample entering the laboratory is correctly identified, inspected for integrity, accessioned in the LIMS and stored under the right conditions before testing begins.

2. Scope

Applies to all samples received by courier, drop-off or internal transfer for testing. Samples requiring a formal chain-of-custody record are also covered by the chain-of-custody SOP.

Definitions

Accessioning	Assigning a unique sample ID in the LIMS and linking it to the test order.
LIMS	Laboratory Information Management System used to track samples, tests and results.
STAT sample	A sample flagged for urgent turnaround ahead of routine samples.

3. Responsibilities

Sample Receiving Technician	Receives, inspects and logs incoming samples, and flags any that do not meet acceptance criteria.
Lab Analyst	Confirms test requirements match the sample type and picks up accessioned samples for testing.
Laboratory Manager	Resolves rejected sample escalations, approves exceptions and reviews the receiving log.
Client Services Coordinator	Contacts clients about rejected, mislabeled or short samples and arranges recollection.

RACI matrix

Activity	Sample Receiving Technician	Lab Analyst	Laboratory Manager	Client Services Coordinator
Log incoming shipment in LIMS	R/A	I	I	-
Inspect sample integrity and packaging	R/A	C	I	-
Approve exception for borderline sample	R	C	A	I

Activity	Sample Receiving Technician	Lab Analyst	Laboratory Manager	Client Services Coordinator
Contact client about rejected sample	I	-	A	R
Store sample pending testing	R/A	I	-	-

R = Responsible, A = Accountable, C = Consulted, I = Informed

4. Materials and PPE

Materials, tools and systems

- LIMS terminal with barcode scanner
- Sample receiving log
- Barcode label printer
- Chain-of-custody and requisition forms
- Insulated shipping coolers with temperature loggers
- Quarantine refrigerator and freezer
- Sample intake bench with disinfectant wipes

Personal protective equipment

- Disposable nitrile gloves
- Lab coat
- Safety glasses or goggles

5. Procedure

Step	Task	Owner	Done
5.1	**Log the incoming shipment** When a shipment arrives, record the courier, time of arrival and number of containers in the sample receiving log before opening any packaging.	Sample Receiving Technician	☐
5.2	**Inspect packaging and temperature** Open the outer packaging and check for damage, leaks or broken seals. For cold-chain samples, read the temperature logger or ice pack condition and record the result immediately. **Checkpoint:** Samples outside the required temperature range are flagged for review before accessioning.	Sample Receiving Technician	☐
5.3	**Verify order and requisition paperwork** Match each sample to its test requisition or electronic order, checking the patient or project ID, tests requested, and collection date and time.	Sample Receiving Technician	☐
5.4	**Check sample integrity** Confirm each container is the correct type, adequately filled, properly capped and free of hemolysis, contamination or breakage. Note any short or clotted samples.	Sample Receiving Technician	☐
5.5	**Confirm labeling accuracy** Compare the sample label to the requisition for name or project ID, unique identifier, and collection date and source. Do not accept samples with illegible or missing labels. **Warning:** Never relabel a sample based on assumption; unresolved labeling issues must be rejected.	Sample Receiving Technician	☐

Step	Task	Owner	Done
5.6	**Accession the sample in the LIMS** Create or confirm the accession record in the LIMS, print barcode labels, and affix one to each container and its aliquots.	Sample Receiving Technician	☐
5.7	**Sort by test type and priority** Route accessioned samples to the correct bench or department, placing STAT samples in the priority rack for immediate pickup by the analyst.	Lab Analyst	☐
5.8	**Store under required conditions** Place samples in the refrigerator, freezer or ambient rack matching the test method's storage requirement, and note the storage location in the LIMS. **Checkpoint:** The storage location in the LIMS matches the physical rack or shelf position.	Sample Receiving Technician	☐
5.9	**Quarantine rejected samples** Move any sample that fails inspection to the quarantine area, mark it as rejected in the LIMS with the reason, and do not release it for testing.	Sample Receiving Technician	☐
5.10	**Notify the client of issues** Contact the submitting client or department the same day for rejected, short or mislabeled samples, and document the conversation and any recollection arranged.	Client Services Coordinator	☐
5.11	**Escalate borderline exceptions** For a sample that is borderline but urgently needed, request the laboratory manager's written approval before releasing it for testing.	Laboratory Manager	☐
5.12	**Close out and file records** At the end of the shift, reconcile the receiving log against the LIMS accession list and file requisition paperwork in the sample folder.	Sample Receiving Technician	☐

6. Quality checks

- Every accessioned sample has a legible label matching its requisition.
- Cold-chain samples are logged with an arrival temperature within range.
- Rejected samples are documented with a reason and client contact record.
- Receiving log entries reconcile with the LIMS accession list each shift.

7. Records

- Sample receiving log
- LIMS accession records
- Rejected sample log
- Chain-of-custody and requisition forms

8. KPIs

- Percentage of samples accessioned within target turnaround
- Sample rejection rate
- Average time from arrival to accessioning
- Percentage of cold-chain samples within temperature range

9. Common mistakes

- Accessioning a sample before checking its integrity.

- Guessing a patient or project ID instead of rejecting an unlabeled sample.
- Leaving cold-chain samples at room temperature while paperwork is checked.
- Not documenting the reason for a rejected sample.

10. Revision history

Revision	Date	Description	Reviewed by
1.0	September 15, 2026	Initial release	Ilia Pirozhenko

Approval

Prepared by	Approved by	Date

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