

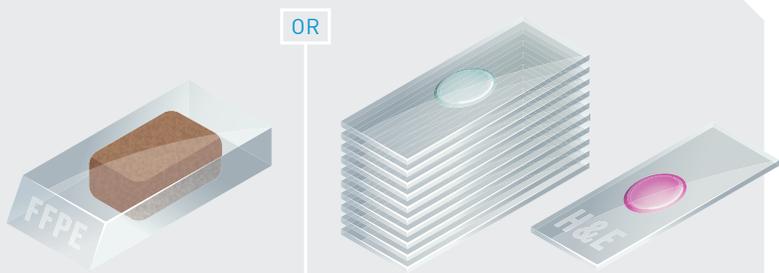
SPECIMEN PREPARATION INSTRUCTIONS

The key sample consideration for FoundationOne analysis is to submit a total mass of tumor cells that is sufficient for us to extract the amount of DNA necessary for analysis. This checklist was designed to help you identify the best sample for each patient. However, solid tumor samples vary from patient to patient, and you may have unique challenges not covered here. Please contact our Customer Care with additional questions.

1 **SAMPLE TYPE**
FFPE BLOCK OR
10 unstained slides + 1 H&E slide

Tissue should be formalin-fixed and embedded into a paraffin block. If sending slides, send 10 unstained slides (charged and unbaked) plus 1 H&E slide.

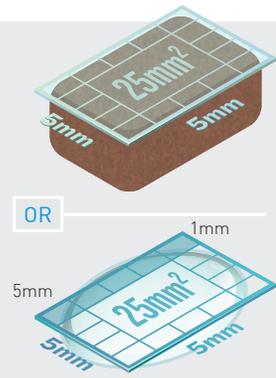
Specimens of suboptimal size, cellularity, or tumor content may require additional unstained slides or an alternate block.



2 **SURFACE AREA**
Optimal: 5 X 5 mm

Tissue should have a surface area of at least 25 mm² (5 × 5 mm, 2.5 × 10 mm, etc.)

Minimum: 1 X 5 mm Minimum surface area for unstained slides is 5 mm²

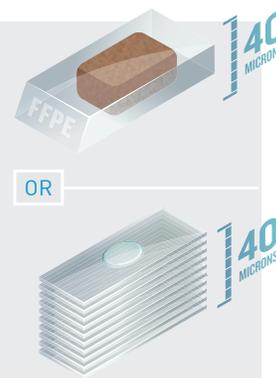


3 **SAMPLE VOLUME**
Optimal: 1 mm³

Optimal sample volume can be achieved by sending optimal tissue surface area (25 mm²) at a depth of ≥ 40 microns. For suboptimal tissue surface area, additional depth is required.

Minimum Tissue Volume: 0.2 mm³ (5 mm² x 40 microns).

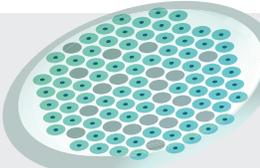
Note: Success of DNA extraction decreases at suboptimal tissue volume.



4 **NUCLEATED CELLULARITY**

Given that DNA is extracted from nucleated cells, the nucleated cellular content impacts DNA yield (eg. small cell carcinoma with high nucleated cell density versus mucinous adenocarcinoma/pseudomyxoma peritonei with very low nucleated cell density)

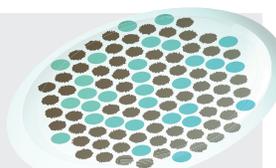
Note: Samples with low cellularity may require greater tissue volume to yield sufficient DNA at extraction



5 **TUMOR CONTENT**
Optimal: ≥ 30%
Minimum: ≥ 20%

If the ratio of malignant to non-malignant cells is too low, sensitivity for detection of certain classes of alterations is reduced and may result in a qualified report, or we may need to request an alternate sample. Please ensure that your sample has as much tumor content as possible

NOTE FOR LIVER SAMPLES: Optimal tumor content for liver specimens is ≥ 40%



Note for bone samples: Do NOT use strong acids (e.g. hydrochloric acid, sulfuric acid, picric acid) for decalcification. Metastatic tumor in bone can often be processed into FFPE and sectioned without decalcification. EDTA is recommended when decalcification is required. Other decalcification procedures using weak acids for short periods of time may be successful but have not yet been fully validated.

Please contact Customer Care team for any additional information.

SHIPPING INSTRUCTIONS

- Place the samples, FoundationOne Requisition Form, into the FoundationOne Specimen Kit.
- Place the specimen kit (including samples and paperwork) into the provided shipping pack and seal the shipping pack.
- Complete the pre-printed shipping labels (if necessary) and apply to shipping pack.
- Ship sealed shipping pack to:
 Accessioning, Clinical Laboratory
 Foundation Medicine, Inc.
 150 Second Street
 Cambridge, MA 02141

Call +358 50 326 8015 to request a pick up.

www.FoundationOne.com

Please call +358 50 326 8015 with questions or to request FoundationOne Specimen Kits.

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