

## Specimen Guidelines

FoundationOne® can help you determine next steps for the care of your patients by accurately detecting all classes of genomic alterations. Below are Specimen Guidelines to help ensure successful genomic profiling.

### Selecting the Best Specimen from Multiple Options

Has the patient received any systemic therapy for their cancer?

**NO** → Use recurrence or original resection (most recent material preferred).  
Metastasis biopsy or primary tumour acceptable (choose site with highest percent tumour or largest tumour focus).

**YES** → MUST use post-systemic therapy specimen, if available.

### Acceptable Samples

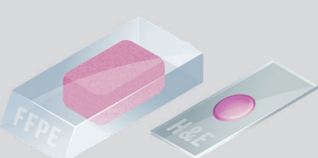
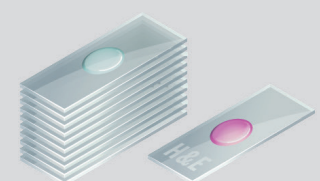
- FFPE specimens, including core needle biopsies, fine-needle aspirates and effusion cytologies.
- Tissue should be formalin-fixed, paraffin embedded. Use standard fixation methods to preserve nucleic acid integrity. 10% neutral-buffered formalin for 6-72 hours is industry standard. **DO NOT** use other fixatives (Bouins, B5, AZF, Holland's).
- Do not decal. When decalcification is required, EDTA is recommended. Do not use strong acids (e.g. hydrochloric acid, sulfuric acid, picric acid).

#### 1 SAMPLE TYPES

When feasible, please send the block + 1 original (not recut) H&E slide.

OR

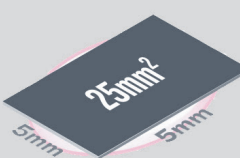
10 unstained slides (positively charged and unbaked at 4-5 microns thick) + 1 original (not recut) H&E Slide.

#### 2 SAMPLE SIZE SURFACE AREA

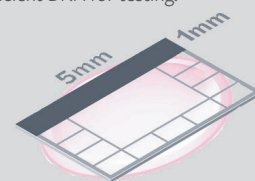
**Optimal: 25 mm<sup>2</sup>**

If sending slides, provide 10 unstained slides cut at 4-5 microns thick.



**Minimal: 5 mm<sup>2</sup>**

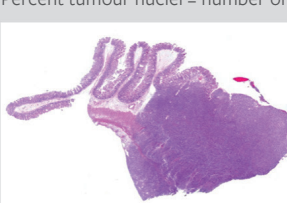
For small (<25mm<sup>2</sup>) or impure samples, additional unstained slides may be needed to extract sufficient DNA for testing.



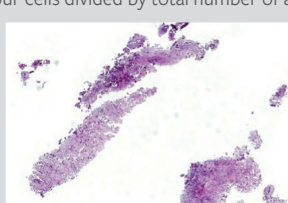
#### 3 TUMOUR NUCLEI PERCENTAGE

**Optimal: 30%    Minimal: 20%**

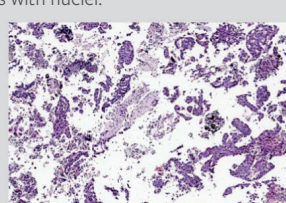
Percent tumour nuclei = number of tumour cells divided by total number of all cells with nuclei.\*



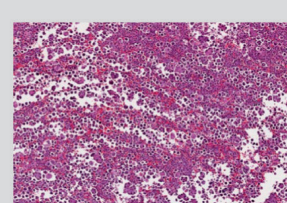
Resection



Small Biopsy



Fine Needle Aspiration (Cell Block)



Fluid Exfoliative Cytology (Cell block)

\* Liver specimens may require additional tumour.