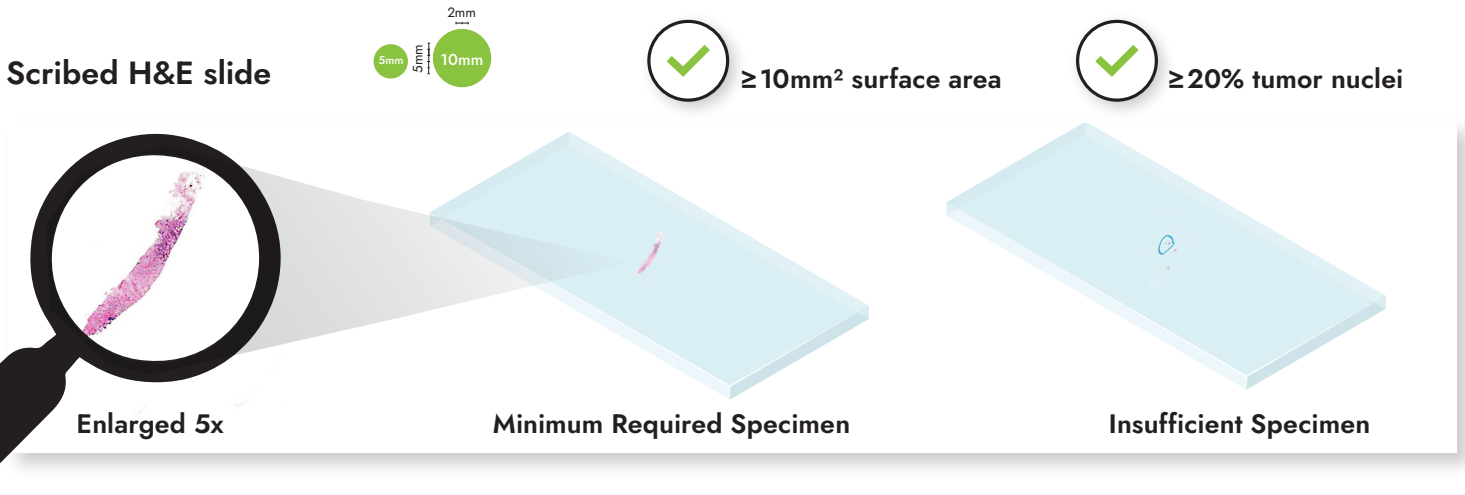


# NGS on Solid Tumor FFPE Tissue

## Specimen requirements

NeoGenomics is committed to ensuring that all specimens have the greatest chance of receiving successful, timely results. It is highly recommended to review the tumor content and surface area specifications below prior to sending specimens for testing.



Tumor enrichment is routinely performed in order to maximize the chances of successful testing. Pathologists identify and circle (depicted above) specific regions enriched with tumor cells from a heterogeneous population and, if necessary, combine multiple noncontiguous regions to increase tumor cell density and content.

### SMALLER SPECIMENS AND THOSE OF MINIMAL TUMOR CONTENT MAY REQUIRE A SUBMISSION OF ADDITIONAL BLOCKS OR SLIDES.

Certain sample types are more likely to be insufficient for testing and include (but are not limited to): any post neo-adjuvant sample, small core needle biopsies or FNAs, and pancreatic samples.

### Solid tumor tissue (biopsy or surgical specimens)

### Considerations for multimodal NGS panels

#### Minimum surface area of $10\text{ mm}^2$ with $\geq 20\%$ tumor content

##### Fixation requirements:

- 10% formalin fixation (neutral buffered).
- Do not use zinc fixative. Decalcified samples are not accepted.
- Please note under and overfixation - it may impact nucleic acid quality.

##### FFPE blocks<sup>1</sup> are preferred, but slides<sup>2</sup> are acceptable

- Tissue sections cut at 5 micron thickness, multiple sections per slide acceptable.
- One additional unstained slide or H&E stained slide is required and will not be returned.

<sup>1</sup> If submitting multiple tissue blocks, a NeoGenomics pathologist will evaluate and choose the best block. If necessary, multiple blocks will be combined to perform the test.

<sup>2</sup> Each profile requires a specific amount of slides. Please refer to the test website for details.

#### Some NeoTYPE<sup>®</sup> NGS panels include multimodal (FISH, IHC, or PCR) testing in addition to NGS testing. These tests have additional requirements:

- Profiles with FISH testing require 50-100 viable tumor cells per probe set.
- Profiles with immunohistochemistry (IHC) testing requires 50-200 viable tumor cells. It is recommended for all IHC testing to submit >200 cells.
- Profiles with microsatellite instability (MSI) testing by polymerase chain reaction (PCR) reflex require at least 40% tumor content if no paired normal is present.

Liquid Biopsy testing, such as InVisionFirst<sup>®</sup> — Lung and NeoLAB<sup>®</sup> Solid Tumor, can be considered for patients whose tissue specimens are insufficient.



For additional questions about solid tumor NGS specimen requirements, please contact your Sales Representative, visit [neogenomics.com](https://neogenomics.com) or call our Client Services team at 866.776.5907, option 3.