

NGS on Solid Tumor FFPE Tissue

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



Tumor enrichment is routinely performed in order to maximize the chances of successful testing. Pathologists identify and circle specific regions enriched with tumor cells from a heterogeneous sample 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 neoadjuvant sample, small core needle biopsies or fine needle aspirations, and pancreatic samples.

Solid tumor tissue (biopsy or surgical specimens)

Minimum surface area of 5mm² with ≥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 blocks¹ are preferred, but slides² 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.

Some NeoTYPE® 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 can be considered for patients whose tissue specimens are insufficient.

For additional questions, contact our Client Services team at 866.776.5907, option 3.

1. 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.

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

NeoGenomics, Inc. is a premier cancer diagnostics company, specializing in cancer genetics testing and information services. We offer one of the most comprehensive oncology-focused testing menus across the cancer continuum, serving oncologists, pathologists, hospital systems, academic centers, and pharmaceutical firms with innovative diagnostic and predictive testing to help them diagnose and treat cancer. Headquartered in Fort Myers, FL, NeoGenomics operates a network of CAP accredited and CLIA certified laboratories for full-service sample processing and analysis services throughout the US; and a CAP accredited full-service, sample-processing laboratory in Cambridge, United Kingdom.

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