

The quality of laboratory results is highly dependent upon proper specimen collection and handling. Listed below are specimen requirements and handling procedures for tissue tumor profiles, liquid biopsy, and heme profiles.

## Tissue and liquid biopsy specimen information

	Profile	Peripheral blood	FFPE block or cut slides	Storage and transportation	
	NeoTYPE® Panels: Breast, Cervical, Colorectal, Endometrial, Esophageal, Gastric, GI Predictive, GIST/Soft Tissue, Head and Neck, HRR, Liver/Biliary, Lung®, Melanoma, Other Solid Tumor, Ovarian, Pancreas, Thyroid, Precision NeoTYPE® DNA & RNA – Brain	N/A	Paraffin block preferred. ≥10mm² of tissue surface area and ≥20% tumor nuclei.		
			Use positively-charged slides and 10% NBF fixative. Do not use zinc or mercury fixatives (B5).	Use cold pack for transport, making sure cold pack is not in direct contact with specimen.  See article <sup>***</sup> for slide use and storage recommendations.	
PROFILES			FISH and IHC requirements NeoTYPE® profiles: FISH: 50-100 viable tumor cells per probe set. IHC: The minimum number of viable tumor cells varies between 50-200 depending on the test requested. It is recommended for all IHC testing to submit >200 viable tumor cells.		
B			10% NBF fixative only, decalcified samples not accepted.		
TRACER TISS			Brain  The following components of NeoTYPE® profiles require ≥4 tumor nuclei:  MSI (excluding colon) if no paired normal is available, and M Promoter Methylation Analysis in brain.		
NEOTYPE AND PANTRACER TISSUE PROFILES	Neo PanTracer™ Tissue Neo PanTracer™ Tissue + HRD‡ NeoTYPE® DNA & RNA – Lung	N/A	Paraffin block preferred. ≥ 5mm² of tissue surface area and ≥ 20% tumor (~500 tumor cells).  (additional 100 neoplastic cells for PD-L1) ≥ 40% tumor (~500 tumor cells) required for HRD assessment		
NEO.			If sending pre-cut slides: 10 unstained slides at 5-micron thickness (2 sections per slide preferred) plus 1 additional unstained slide for H&E.		
			For cell block, FNAs, small needle core biopsies: 20 unstained slides (2 sections per slide preferred) plus 1 additional unstained slide for H&E.		
			Please use positively-charged slides and 10% NBF fixative.		
LIQUID BIOPSY	Neo PanTracer™ LBx′	Two x 10 mL Streck Cell-Free DNA BCT* tubes	N/A	Do not refrigerate. Special collection tubes and shipping requirements apply. Please contact Client Services for kits and see instructions provided in kit.	

## Hematologic specimen information

Profile	Peripheral blood	Bone marrow	FFPE block or cut slides	Fresh tissue	Storage and transportation	FFPE additional requirements
Neo Comprehensive® – Heme Cancers  Neo Comprehensive® – Myeloid Disorders  NeoTYPE® – AITL/Peripheral T-Cell Lymphoma®, ALL', AML Prognostic,	Disorders Cell Stic, Ina*,  5 mL in EDTA tube  Paraf Pleas charg 10% I Do no merce		Paraffin block preferred. Please use positively charged slides and 10% NBF fixative. Do not use zinc or		Use cold pack for transport, making sure cold pack is not in direct contact with specimen. For fresh specimens, ship same day as drawn whenever possible. (See notes below)	Biopsies and other surgical specimens: Minimum of ≥10mm² surface area with ≥20% tumor nuclei."  Cytology cell blocks or FNA FFPE: Minimum ≥500 tumor cells with ≥20% tumor nuclei." Available for
Lymphoid Disorders, Lymphoma*, MDS/CMML  NeoTYPE* CLL				0.5-1 cm <sup>3</sup> in PRMI for FISH panel only		select tests, see website to confirm before sending.  - Requisitions must note specimen is FNA.  - FNA smears, unembedded FNA
NeoTYPE® Follicular Lymphoma®		mercury fixatives (B5).		See article <sup>***</sup> for slide use and storage recommendations.	samples, or cytology cells in suspension are not accepted.  FISH requirements: 50-100 viable tumor cells per probe set.  "10% NBF fixative only, decalcified samples not accepted.	

<sup>&#</sup>x27;Not approved by the New York State Department of Health

NeoGenomics cannot accept any specimens (fresh or fixed) infected with Category A pathogens including, but not limited to, variant Creutzfeldt-Jakob (mad cow), Tularemia, Brucella, etc. FFPE specimens are acceptable for Tuberculosis only.

For full details, see https://www.neogenomics.com/providers/support-resources

NeoGenomics, Inc. is a premier cancer diagnostics company specializing in cancer genetics testing and oncology data solutions. 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, England, United Kingdom.



<sup>&</sup>quot;Ship same day as drawn whenever possible; specimens less than 7 days old preferred. To ensure sample stability, ship samples directly to NeoGenomics Aliso Viejo.

<sup>&</sup>quot;Impact of environmental stress on various histology slide types. Ventana. 2013; N4629 0313B. https://NeoGenomics.com/sites/default/files/2024-10/Impact-of-env-stress-on-histology-slide-types-Ventana-2013.pdf

<sup>&</sup>lt;sup>‡</sup> HRD validated for ovarian cancer only.