



Tumor Profiles and Liquid Biopsy Specimen Requirements and Handling Procedures

The quality of laboratory results is highly dependent upon proper specimen collection and handling. Listed below are specimen requirements and handling procedures for Tumor Profiles and Liquid Biopsies.

	Profile	Peripheral Blood	Bone Marrow	FFPE Block or Cut Slides	Fresh Tissue	Storage & Transportation	FFPE Additional Requirements
Heme	Neo Comprehensive™ – Myeloid Disorders NeoTYPE® – AITL/Peripheral T-Cell Lymphoma, ALL, AML Prognostic, Discovery Profile for Hematologic Cancers, JMML, Lymphoid Disorders, Lymphoma, MDS/CMML	5 mL in EDTA tube	2 mL in EDTA tube	Paraffin block preferred. Please use positively-charged slides and 10% NBF fixative. Do not use zinc or mercury fixatives (B5).	N/A	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.	<p>Biopsies and other surgical specimens: Minimum of ≥10mm² surface area with ≥20% tumor nuclei*</p> <p>Cytology cell blocks or FNA FFPE: Minimum ≥500 tumor cells with ≥20% tumor nuclei* Available for select tests, see website to confirm before sending - Requisitions must note specimen is FNA - FNA smears, unembedded FNA samples, or cytology cells in suspension are not accepted</p> <p>FISH and IHC requirements for NeoTYPE® Cancer 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.</p> <p>*10% NBF fixative only, decalcified samples not accepted. The following components of NeoTYPE® Cancer Profiles require ≥40% tumor nuclei: MSI (excluding Colon) if no paired normal is available, and MGMT Promoter Methylation in brain.</p>
	NeoTYPE® CLL	5 mL in EDTA tube	2 mL in EDTA tube	N/A	0.5-1 cm ³ in RPMI		
	NeoTYPE® Follicular Lymphoma	N/A	N/A	Paraffin block preferred. Please use positively-charged slides and 10% NBF fixative. Do not use zinc or mercury fixatives (B5).	N/A		
Solid Tumor	Neo Comprehensive™ – Solid Tumor NeoTYPE® DNA & RNA – Brain, Lung NeoTYPE® – Breast, Cervical, Colorectal, Endometrial, Esophageal, Gastric, GI Predictive, GIST/Soft Tissue, Head and Neck, HRD+, Liposarcoma Fusion, Liver/Biliary, Lung, Melanoma, Other Solid Tumor, Ovarian, Pancreas, Thyroid, Precision	N/A	N/A	Paraffin block preferred. Please use positively-charged slides and 10% NBF fixative. Do not use zinc or mercury fixatives (B5).	N/A		
Liquid Biopsy	NeoLAB® Solid Tumor and InVisionFirst® – Lung	Two x 10 mL Streck Cell-Free DNA BCT® tubes	N/A	N/A	N/A	Do not refrigerate. Special collection tubes and shipping requirements apply. Please contact Client Services for kits and see instructions provided in kit.	N/A
	PIK3CA Mutation CDx Plasma	Please contact Client Services	N/A	N/A	N/A	Please contact Client Services	
	RaDaR®	Two x 10 mL Streck Cell-Free DNA BCT® tubes		Paraffin block preferred. Please use positively-charged slides and 10% NBF fixative. Do not use zinc or mercury fixatives (B5).			Minimum surface area 20mm ² with ≥20% tumor content. Tissue depth should be ≥50 microns.

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://neogenomics.com/client-services/forms-and-kits>.