



# Tumor Profiles & 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 & Liquid Biopsies.

	Profile	Peripheral Blood	Bone Marrow	FFPE Block or Cut Slides	Fresh Tissue	Storage & Transportation	FFPE Additional Requirements
Heme	NeoTYPE®- AITL/Peripheral T-Cell Lymphoma, AML Prognostic, JMML, Lymphoma, MDS/CMML, Myeloid Disorders	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><b>NGS:</b> 20% Tumor content. &gt;500 cells ideal but can attempt with &gt;200 cells.</p> <p><b>MSI (except for Colon), MLH1 Promoter Methylation in Colon, MGMT methylation in Brain:</b> 40% Tumor content. &gt;200 cells</p> <p><b>FISH:</b> 50-100 viable tumor cells needed per probe set.</p> <p><b>Fine Needle Aspirate (FNA):</b> Requisition must note specimen is FNA. FFPE cell blocks are acceptable if pathologist attaches note verifying sample has &gt;30% tumor or abnormal cells (required). FNA smears or cells in suspension are not accepted.</p>
	NeoTYPE® CLL Prognostic	5 mL in EDTA tube	2 mL in EDTA tube	N/A	0.5-1 cm <sup>3</sup> 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	NeoTYPE®- Brain, Breast, Cervical, Colorectal, Endometrial, Esophageal, Gastric, GI Predictive, GIST/Soft Tissue, Head & Neck, HRD+, Liposarcoma Fusion, Liver/Biliary, Lung, Melanoma, Other Solid Tumor, Ovarian, Pancreas, Thyroid, Precision, Discovery	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® Heme - AML, BTK Inhibitor Acquired Resistance, MDS/CMML, Myeloid Disorders, FLT3, IDH1, IDH2, inv(16) CBFβ-MYH11 Translocation, KIT (c-KIT), KRAS, NPM1, NRAS, PML-RARA Translocation t(15;17), RUNX1-RUNX1T1(AML1-ETO) Translocation t(8;21)	2 x 6 mL EDTA tubes (total 12 mL) or 10 mL in EDTA tube	N/A	N/A	N/A		N/A
	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.	
	PIK3CA Mutation CDx Plasma	Please contact Client Services	N/A	N/A	N/A	Please contact Client Services	

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>.