

<b>FISH probes/profile</b>	<b>Abnormality Detected</b>
<b>ALL</b>	
Pediatric	trisomy 4, 10, 17, t(9;22), t(12;21), (11q23) MLL
Adult	trisomy 6, 21, t(9;22), (11q23) MLL
<b>AML</b>	M2 t(8;21), M3 t(15;17), RARA break-apart, M4 inv(16)
<b>CLL</b>	(6q deletion) MYB, (11q deletion) ATM, trisomy 12, 13q deletion, (17p deletion) P53
<b>CML</b>	t(9;22) with ASS
<b>MDS</b>	-5/5q deletion, -7/7q deletion, trisomy 8, 20q deletion
<b>MPD</b>	-5/5q deletion, -7/7q deletion, trisomy 8, 9, (13q14) RB1, 20q deletion
<b>Burkitt Lymphoma</b>	t(8;14), MYC break-apart 8q24
<b>Follicular Lymphoma</b>	t(14;18)
<b>Mantle Cell Lymphoma</b>	t(11;14)
<b>PCD/MM</b>	13q deletion, trisomy 7, 9, 11, 17, (17p deletion) P53, (14q32) IGH break-apart
If IGH abnormal reflex to:	t(4;14), t(11;14), t(14;16)
<b>POCs</b>	trisomy 13, 15, 16, 18, 21, 22, X, Y
<b>Sex mismatched transplant monitoring</b>	XX/XY

<b>Specimen Requirements</b>		<b>(ship specimens with refrigerated cold pack)</b>
<b>Flow Cytometry</b>	Peripheral Blood	3 ml in sodium heparin – preferred (green top) or 3 ml in EDTA (purple top)
	Bone Marrow Aspirate	1-2 ml in sodium heparin – preferred (green top) or 1-2 ml in EDTA (purple top)
	Tissue	Multiple 3-4 mm pieces of tissue in transport media
	Body Fluids	Mix 1:1 in RPMI transport media
<b>Cytogenetics</b>	Peripheral Blood	5 ml in sodium heparin (green top)
	Bone Marrow Aspirate	1-2 ml in sodium heparin (green top)
	Cord Blood	2-5 ml in sodium heparin (green top)
	Tissue	5-10 mm or larger sized tissue in transport media
<b>FISH</b>	Peripheral Blood	3 ml sodium heparin – preferred (green top) or 3 ml in EDTA (purple top)
	Bone Marrow Aspirate	1-2 ml sodium heparin – preferred (green top) or 3 ml in EDTA (purple top)
	Tissue	Please call for additional specimen requirements
<b>PCR</b>	Peripheral Blood	5 ml EDTA (purple top) preferred; ACD (yellow top) acceptable
	Bone Marrow Aspirate	1-2 ml EDTA (purple top) preferred; ACD (yellow top) acceptable
	Tissue	Minimum of 250 mg tissue in transport media
	Formalin fixed paraffin embedded tissue	
<b>Morphology</b>	Core/Clot	Tissue in 10% neutral buffered formalin
	Bone Marrow Smears	5-10 air-dried smears

#### **Additional Information for Optimal Analysis:**

- ❖ Bone Marrow Smears should not be exposed to formalin vapors from open core/clot biopsy jars.
- ❖ Bone Marrow Smears should be completely air-dried (1-2 hours) prior to packaging in slide holders.
- ❖ Please label each specimen with patient name plus two additional unique patient identifiers.
- ❖ Please include a copy of patient's most recent CBC and clinical history.