

Clariant Panel Descriptions

FLOW CYTOMETRY PANELS

The minimum number of markers necessary arrive at a final diagnosis will be used and are determined by the suspected diagnosis, histology and working diagnosis.

Comprehensive Panel Analysis

CD2, CD3, CD4, CD5, CD7, CD8, CD10, CD11b, CD11c, CD13, CD14, CD15, CD16, CD19, CD20, CD33, CD34, CD38, CD45, CD56, CD64, CD117, Kappa, Lambda, HLA-DR

B- and T-Cell Panel Analysis

CD2, CD3, CD4, CD5, CD7, CD8, CD10, CD11c, CD13, CD14, CD16, CD19, CD20, CD22, CD23, CD38, CD45, CD56, Kappa, Lambda, FMC7

Plasma Cell Panel Analysis

CD19, CD38, CD45, CD56, CD117, CD138, cKappa, cLambda

Chronic Lymphocytic Leukemia/small Lymphocytic Leukemia (CLL/SLL) ZAP-70 Panel Analysis

ZAP-70, CD3, CD5, CD19, CD45

IMMUNOHISTOCHEMISTRY PANELS

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Lymphoma vs. Reactive Hyperplasia

CD3, CD5, CD10, CD20, CD23, CD43, CD45, CD79a, CCND1, BCL2, BCL6, Kappa, Lambda, IgD, CD21, Ki-67

Non-Hodgkin Lymphoma vs. Hodgkin Lymphoma

CD3, CD15, CD20, CD30, CD45, CD79a, PAX-5, OCT-2, BOB1, FASCIN, EBV

Plasma Cell Myeloma

CD20, CD56, CD79a, CD138, CCND1, Kappa, Lambda

Acute Leukemia

CD3, CD10, CD20, CD34, CD56, CD61, CD79a, CD117, HLA-DR, MPO, GlycoA, TdT, Lysozyme, CD68, CD15, CD43

Myelodysplastic Syndrome (MDS)/Myeloproliferative Neoplasm (MPN)

CD3, CD5, CD10, CD20, CD23, CD43, CD45, CD79a, CCND1, BCL2, BCL6, Kappa, Lambda, IgD, CD21, Ki-67

Lymphoma vs. Other Malignancy

CD3, CD5, CD10, CD20, CD23, CD43, CD45, CD79a, CCND1, BCL2, BCL6, Kappa, Lambda, IgD, CD21, Ki-67

Low Grade Lymphoma Classification

CD3, CD5, CD10, CD20, CD23, CD43, CD45, CD79a, CCND1, BCL2, BCL6, Kappa, Lambda, IgD, CD21, Ki-67

Aggressive Lymphoma Classification

CD3, CD5, CD10, CD20, CD23, CD43, CD45, CD79a, CCND1, BCL2, BCL6, Kappa, Lambda, IgD, CD21, Ki-67

Mast Cell Disease

Tryptase, CD117, CD25, CD2

Langerhans Cell Histiocytosis/Dendritic Cell Proliferation

S100, CD1a

FISH PANELS

The minimum number of markers necessary to arrive at a final diagnosis will be used and are determined by the suspected diagnosis, histology and working diagnosis.

Chronic Lymphocytic Leukemia (CLL/SLL)

ATM (11q22 deletion)
D13S319 (13q deletion)
p53 (17p13 deletion)
Trisomy12 (+12)

Plasma Cell Neoplasm/Myeloma

D13S319 (13q deletion)
p53 (17p13 deletion)
IGH Translocations
* IGH/CCND1; t(11;14)
* IGH/FGFR3; t(4;14),
* IGH/MAF; t(14;16) – optional

Myelodysplastic Syndromes (MDS)

5q33-34 (-5q/5q-)
7q31 (-7/7q-)
20q12 (20q deletion)
Trisomy 8 (+8)

Non-Hodgkin Lymphoma (NHL)

IGH/CCND1, t(11;14)
MYC Rearrangement (8q24)
BCL2 Rearrangement (18q21)
BCL6 Rearrangement (3q27)
IGH Rearrangement (14q32)

CYTOCHEMICAL STAINS

Myeloperoxidase (MPO) Nonspecific esterase (NSE) Acid fast bacilli (AFB) Gomori methenamine silver (GMS) Warthin-Starry silver Congo red Gram stain

PCR Assays

BCR/ABL Major (p210; b2a2 or b2a3)
BCR/ABL Minor (p190; e1a2)
PML/RARA, t(15;17) for APL monitoring
B-Cell (IGH) Gene Rearrangement, B-Cell Clonality
T-Cell (TCR-β,–γ) Gene Rearrangement, T-Cell Clonality
JAK2 mutation analysis for PV, ET, IMF
IGH/CCND1, t(11;14) for MCL
IGH/BCL2, t(14;18) for FL
FLT3 ITD mutation analysis for AML
FIP1L1/PDGFR4 (4q12 deletion)
NPM1 mutation analysis for AML
MPL mutation analysis for ET, IMF

Individual FISH Tests

IGH/CCND1; t(11;14)	IGH/MAF; t(14;16)	5q33-34 (-5/5q-)
IGH/BCL2; t(14;18)	ATM (11q22 deletion)	7q31 (-7/7q-)
BCL2 Rearrangement (18q21)	D13S319 (13q deletion)	Trisomy 8 (+8)
IGH/MYC; t(8;14)	p53 (17p deletion)	20q12 (20q deletion)
MYC Rearrangement (8q24)	Trisomy 12 (+12)	BCR/ABL; t(9;22)
BCL6 Rearrangement (3q27)	AML1/ETO; t(8;21)	FIP1L1/PDGFR4 (4q12 deletion)
IGH Rearrangement (14q32)	PML/RARA; t(15;17)	PDGFRB Rearrangement; t(5;12)
AP12/MALT1; t(11;18)	RARA Rearrangement; t(17q12-21)	X,Y for Bone Marrow Transplant
MALT Rearrangement (18q21)	CBFB Rearrangement; inv(16), t(16;16)	
IGH/FGFR3; t(4;14)	MLL Rearrangement (11q23)	