

PREFERRED SPECIMEN REQUIREMENTS

Test	Blood	Bone Marrow	Fresh tissue
Flow	5-10 ml Dark Green Top Tube	2-3 ml Dark Green Top Tube	Fresh tissue in RPMI or sterile saline
Cytogenetics	5-10 ml Dark Green Top Tube	2-3 ml Dark Green Top Tube	Fresh tissue in RPMI or sterile saline
FISH	5-10 ml Dark Green Top Tube	2-3 ml Dark Green Top Tube	Fresh tissue in RPMI or sterile saline
Molecular (PCR and Myeloid NGS)	5-10 ml Lavender Top Tube	2-3 ml Lavender Top Tube	Fresh tissue in RPMI or sterile saline
Chronic Lymphoid NGS Panel	5-10 ml Lavender Top Tube	2-3 ml Lavender Top Tube	Fresh tissue, or 10-15 FFPE slides

FLOW CYTOMETRY PANELS

EXTENDED/STANDARD PANEL:

CD2, CD3, CD4, CD5, CD7, CD8, CD10, CD11B, CD11C, CD13, CD14, CD15, CD16, CD19, CD20, CD23, CD33, CD34, CD38, CD41, CD45, CD56, CD64, CD71, CD117, CD138, CD235A, FMC-7, HLA-DR, KAPPA, LAMBDA

STANDARD PANEL:

CD2, CD3, CD4, CD5, CD7, CD8, CD10, CD11c, CD13, CD14, CD16, CD19, CD20, CD23, CD33, CD34, CD38, CD45, CD56, CD64, CD117, HLA-DR, Kappa, Lambda

T&B Tissue Flow Panel:

CD2, CD3, CD4, CD5, CD7, CD8, CD10, CD11c, CD19, CD20, CD23, CD34, CD38, CD45, CD56, kappa, lambda

AML ADD-ON:

nTdT, cmpo, CD34, CD117, cCD22, cCD79a, cCD3, CD11b, CD123, CD45

B-ALL ADD-ON:

nTdT, cmpo, CD19, cCD22, CD10, , cCD79a, CD34, cCD3, CD45

PLASMA CELL ADD-ON PANEL:

cKappa, cLambda, CD20, CD38, CD56, CD138, CD19, CD117, CD45

AML FOLLOW UP PANEL:

CD13, CD14, CD16, , CD19, CD33, CD34, CD45, CD64, CD117, HLA-DR, nTdT, cmpo, CD34, CD117, cCD22, cCD79a, cCD3, CD11b, CD123, CD45

B-ALL FOLLOW-UP PANEL:

Kappa, Lambda, CD23, CD19, CD11c, CD10, CD5, CD34, CD20, CD45, nTdT, cmpo, CD19, cCD22, CD10, , cCD79a, CD34, cCD3, CD45

PLASMA CELL FOLLOW-UP PANEL:

cKappa, cLambda, CD20, CD38, CD56, CD138, CD19, CD117, CD45

FLUORESCENCE IN SITU HYBRIDIZATION (FISH) PANELS

ACUTE MYELOGENOUS LEUKEMIA:

RUNX1T1/RUNX1 t(8;21)
PML/RARA t(15;17)
CBFB (16q22)
KMT2A (11q23)
BCR/ABL1 t(9;22)
5p15/EGFR1
-7/del 7q31
trisomy 8

ACUTE LYMPHOBLASTIC LEUKEMIA:

BCR/ABL1 t(9;22)
KMT2A (11q23)
-7/del 7q31
trisomy 8

CHRONIC LYMPHOCYTIC LEUKEMIA:

del 11q22 (ATM)
del 13q14.2
del 17p (TP53)
trisomy 12
t(11;14) CCND1/IGH (BCL1)

CHRONIC MYELOGENOUS LEUKEMIA:

BCR/ABL1 t(9;22)

HYPEREOSINOPHILIC SYNDROME/ CHRONIC

EOSINOPHILIC LEUKEMIA:

5q32-33 PDGFRB
4q12-FIPIL2, CHIC2, PDGFRα
BCR/ABL1 t(9;22)
FGFR1

LYMPHOMA

t(14;18) IGH/BCL2
t(11;14) CCND1/IGH (BCL1)
MYC
BCL6

MYELOYDYSPLASTIC DISORDER:

5p15/EGFR1
-7/del 7q31
trisomy 8
del 13q14.2
del 20q12
KMT2A (11q23)
del 17p (TP53)

MYELOPROLIFERATIVE/

MYELOYDYSPLASTIC DISORDERS:

-7/del 7q31
trisomy 8
BCR/ABL1 t(9;22)
del 20q12

MM/PLASMA CELL DYSCRASIA:

t(14;16) IGH/MAF
del 17p (TP53)
RB1
t(4;14) FGFR3/IGH
1p32/1q21
t(11;14) CCND1/IGH (BCL1)

SEX MIS-MATCHED TRANSPLANT

XX
XY

INDIVIDUAL PROBES

ETV6/RUNX1 t(12;21) – Pediatric ALL
t(8;14) MYC/IGH – Burkitt Lymphoma
BIRC3/MALT1 – MALT lymphoma

RapidPath Myeloid NGS Gene list (DNA level point mutations and indels are targeted for analysis)

Hotspot (28):

ABL1, ANKRD26, BRAF, CBL, CSF3R, DDX41, DNMT3A, FLT3, GATA2, HRAS, IDH1, IDH2, JAK2, KIT, KRAS, WT1, MPL, MYD88, NPM1, NRAS, PPM1D, PTPN11, SETBP1, SF3B1, SMC1A, SMC3, SRSF2, U2AF1

Full Gene (17):

ASXL1, BCOR, CALR, CEBPA, ETV6, EZH2, IKZF1, NF1, PHF6, PRPF8, RB1, RUNX1, SH2B3, STAG2, TET2, TP53, ZRSR2

For chronic lymphoid NGS panel content, see: <https://www.genpathdiagnostics.com/hcp/onkosight-advanced-tm-next-generationsequencing/>