

***For your reference, subject to updates and changes

HEMATOLOGY FISH PROBES & PROFILES

<u>HEMATOLOGIC FISH PROBES & PROFILES</u> <u>Acute Myeloid Leukemia (AML)</u> 5q21 deletion/-5 · 7q31 deletion/-7 · Trisomy 8 · t(8;21) (RUNX1T1/RUNX1) · 11q23 (MLL) · t(15;17) (PMURARA) · 16q22 (CSFS) · 17q21 (RARA) <u>Chronic Lymphocytic Leukemia (CLL)</u> 6q deletion (MYS) · t(11;14) (CCND1/IGH) · 11q22.3 deletion (ATM) · 17p13.1 deletion (TP53) · Trisomy 12 · 13q14 deletion/-13 <u>Chronic Myleogenous Leukemia (CML)</u> t(9;22) (BCR/ABL) with ASS/9q34 deletion	<u>Eosinophilia</u> 4q12 deletion/rearrangment (CHIC2/FIP1 UPDGFRa) · 5q32 rearrangement (PDGFRb) · 5q33 deletion · 8p12 (FGFR1) · 8p11 deletion/ duplication · 16q22 inv/del/t(16;16) (CBFB) <u>Myeloproliferative Neoplasm (MPN)</u> 4q12 deletion/rearrangment (CHIC2/FIP1 UPDGFRa) · 5q32 rearrangement (PDGFRb) ·5q33 deletion · 8p12 (FGFR1) · 8p11 deletion/ duplication · t(9;22) (SCA/ASL) with ASS/9q34 del <u>Myelodysplasia (MDS)</u> 5q31 deletion/-5 · 7q31 deletion/-7 · Trisomy 8 · 20q12 deletion	<u>Multiple Myeloma-MGUS (MM-MGUS)</u> Hyperdiploidy of 3, 7, 9, and 11 · 13q14 deletion/-13 14q32 rearrangement (IGH) ·t(4;14) (FGFR3/IGH) t(11;14) (CCND1/IGH) · t(14;16) (IGH/MAR) ·17p deletion (TP53) <u>Non-Hodgkin Lymphoma (NHL)</u> <i>Anaplastic Large Cell</i> -ALK rearrangement <i>Diffuse Large Cell</i> -SCL6 rearrangement <i>Burkitt</i> -t(8;14) (MYC/CEP 8/IGH) <i>Mantle Cell</i> -t(11;14) (CCND1/IGH) <i>Follicular</i> -t(14;18) (IGH/SCL2) <i>Marginal Zone B-cell</i> -MALT1 rearrangement
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HEMATOLOGY MOLECULAR GENETICS BY PCR

<u>Acute Leukemia</u> <u>Acute Myeloid Leukemia (AML)</u> 16q22 inversion (CBFB) t(8;21) (RUNX1T1/RUNX1) t(9;22) (BCR/ABL MBR and mbr) <u>Acute Lymphocytic Leukemia (ALL)</u> t(9;22) (SCA/ASL MBR and mbr) <u>Acute Promyelocytic Leukemia</u> t(15;17) (PMURARA)	<u>Chronic Myeloid Leukemia (CML)</u> t(9;22) (BCR/ABL MBR and mbr) PCR (RQ-PCR) Reverse transcriptase quantitative PCR (RQ-PCR) ABL Kinase Mutation Analysis <u>Chronic Lymphocytic Leukemia (CLL)</u> IgVH Hypermutation Analysis TP53 Mutation Analysis	<u>Myeloproliferative Neoplasm (MPN)</u> JAK2 V617F Mutation Analysis JAK2 Exon 12-14 Mutation Analysis MPL Mutation Analysis CALR Mutation Analysis <u>Non-Hodgkin’s Lymphoma (NHL)</u> 8-cell IGH heavy chain gene rearrangement TCR gamma/T-cell receptor rearrangement t(14;18) (IGH/SCL2)-Follicular lymphoma
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