

**Title: PRC-HFH-CYG-5.87-pro-flc-FISH HEMATOLOGY-ONCOLOGY PANELS**  
Cytogenetics FISH Laboratory Hematology/Oncology Panels Offered

Probe names listed in blue will only be performed when requested based on diagnosis/results of pathologic morphology and other cytogenetic/molecular studies.

**CLL (Chronic Lymphocytic Leukemia)**

- del(13)(D13S319)/-13
- 12 centromere
- ATM (11q22.3) and 11 centromere
- t(11;14) – reflex 14q32 IGH, t(14;18) and t(8;14)
- 17p (TP53) and 17 centromere

**MM (Multiple Myeloma)**

- del(13)(RB1)/-13
- t(11;14) - reflex if IGH split (see below)
- 17p (TP53) and 17 centromere
- 1p loss/1q gain
- MYC break apart probe

**MM Reflex Panel**

- 14q32 break apart probe
- t(4;14) FGFR3::IGH
- t(14;16) IGH::MAF
- t(6;14) CCND3::IGH
- t(14;20) IGH::MAFB

**Lymphoma - B cell NHL**

- MYC break apart probe – reflex t(8;14)
- BCL6 (3q27)
- t(14;18) IGH::BCL2 – reflex 14q32 IGH, t(11;14) and t(8;14)

**Lymphoma – MALT or Marginal Zone****(MZL)**

- t(11;18) BIRC3::MALT1
- 18q MALT1 break apart
- BCL6 (3q27) (+3)
- t(14;18) IGH::BCL2

**Lymphoma – Splenic Marginal Zone (SMZL)**

- 7q deletion
- BCL6 (3q27) (+3q)

**AML Confirmation (singly if detected by CA)**

- t(15;17) PML::RARA
- inv(16) CBFβ
- t(8;21) RUNX1T1::RUNX1
- 11q23 KMT2A
- 17p13 TP53
- **3q26 EVI1 if detected by CA**

**AML Cryptic Panel if CA negative/suspicious**

- 11q23 KMT2A
- 17p13 TP53

**Monitoring:** This procedure will be reviewed at least once every 24 months or more frequently, if applicable, and signed off by the CLIA director.

**ALL (Acute Lymphoblastic Leukemia)**

- t(9;22) BCR::ABL1
- 11q23 KMT2A
- t(12;21) ETV6::RUNX1
- 4 centromere, 10 centromere, 17 centromere
- **Xp/Yp CRLF2 break apart probe**
- **9p JAK2 break apart probe**

**CMML (rule out CMML panel)****Chronic Monomyelocytic Leukemia**

- 4q12 FIP1L1::CHIC2::PDGFRA
- 5q33 PDGFRB
- 8p12 FGFR1, 8cen D8Z2
- t(9;22) BCR::ABL1
- **9p JAK2 break apart probe**

**MDS (Myelodysplastic Syndrome)**

- del(13)(D13S319)/-13
- Monosomy 5/5q- EGR1
- Monosomy 7/7q-
- 8 centromere and 20q-
- 11q23 KMT2A
- 17p13 TP53

**MPN (Myeloproliferative Neoplasm)**

- del(13)/+21
- monosomy 5/5q- EGR1
- monosomy 7/7q-
- 8 centromere and 20q-
- t(9;22) BCR::ABL1
- **17p13 TP53**

**MPN/MDS combined**

- del(13)/+21
- 5/5q- EGR1
- 7/7q-
- 8 centromere and 20q-
- t(9;22) BCR::ABL1 (also detecting +9)
- 11q23 KMT2A
- 17p13 TP53