Henry Ford Health Cytogenetics Laboratory
FISH Tests/Probes Offered

Oncology – Interphase analysis

1p36/1q25 -19p13/19q13
     Glioma/Astrocytoma
1q21.3/1p32.3 CKS1B/CDKN2C MM
n-MYC 2p24.1 neuroblastoma
2p11.2 IGK breakapart
2p23 ALK t(2;5) or inv(2) probe
inv(3)(q26) EVI1 break apart probe
3q27 BCL6 break apart probe
3q28 TP63 breakapart
4/10/17 Centromeres - ALL
4q12 FIP1L1::CHIC2::PDGFRA
t(4;14) IGH::FGFR3 (MM)
5q33 PDGFRb break apart probe
-5/5q- (5q deletion probe)
-7/7q- (7q deletion probe)
7 MET amplification probe
6p21.1 TFEB break apart
6p25.3 DUSP22::IRF4 NHL
t(6;14) CCND3::IGH (MM)
8 centromere enumeration
8p12 FGFR1 break apart/enumeration
8q24 MYC/8cen amplification probe
8q24 MYC Break apart
t(8;14) Burkitt
t(8;21) AML-M2
t(9;22) CML or ALL
9p21 CDKN2A/9cen
9p24.1 JAK2 breakapart
9q34 deletion probe
10p11.21 RET breakapart probe
11q23 MLL translocation/deletion probe
11q22.3 ATM deletion probe
t(11;14) Mantle cell
t(11;18) BIRC3::MALT1
12 centromere enumeration
12p13 ETV6 ALL/Sarcoma
12q13 DDIT3 (CHOP) Sarcoma
t(12;21) childhood ALL
13/21 - RB1 deletion / 21 enumeration
13q14 RB1 deletion (MM)
13q14.3 D13S319 deletion (CLL/MDS)
13q34 deletion probe
14q11.2 TRAD breakapart
14q32.3 IGH break apart probe
t(14;16) IGH::MAF (MM)

t(14 ;20) IGH::MAFB (MM)
t(14;18) IGH::BCL2 Follicular cell
t(15;17) AML-M3
16p11 FUS Sarcoma
inv(16) AML-M4
17q21 RARA break apart
17p13.1 (p53) deletion
18q11.2 SS18 (SYT) Sarcoma
18q21 MALT1 break apart lymphoma
22q11.21-q11.23 IGL breakapart
20q12 D20S108 deletion probe
22q12 EWSR1 Sarcoma
Xp22.33/Yp11.32 CRLF2 breakapart
Xp11.2 TFE3 break apart
X-Y sex mismatched bmt

Microdeletion – Metaphase analysis

4p16.3 Wolf-Hirschhorn (WHS)
5p Cri du Chat (**D5S23(g)**/EGR1(or))
7q Williams Syndrome (WMS)
15q SNRPN – Prader Willi
15q D15S10 – Angelman
17p11.2 Smith-Magenis (SMS)
17p13.3 Lissencephaly (LIS1)
22q DiGeorge Syndrome (DGS –
HIRA/ARSA)
Xp22 Kallmann Syndrome (KAL)
Xp22.3 STS (Steriod Sulfatase)
     X-linked Ichthyosis
Xq13 XIST
Yqh (aqua)
Yp11.3 SRY region
Acrocentric (beta-satellite) probe