

FORMALIN FIXED PARAFFIN EMBEDDED FLUORESCENCE *IN-SITU* HYBRIDIZATION TESTS AVAILABLE

BOWEL CANCER

EGFR/D7Z1 Amplification of EGFR

BREAST CANCER

ERBB2/D17Z1 Amplification of ERBB2
EGFR/D7Z1* Amplification of EGFR
MYC/D8Z1/IGH@* Amplification of MYC
ERBB2/TOP2A/D17Z1* Loss/amplification TOP2A

CERVICAL SQUAMOUS CELL CARCINOMA

hTERC/D7Z1 Imbalance 3q

CHONDROMYXOID FIBROMA

MYB/D6Z1 Loss of 6q

CHOROICAL MELANOMA/ UVEAL MELANOMA

1p36/1q25 Loss of 1p
D3Z1 Loss of 3cen
MYC/D8Z1 Amplification of MYC
MYB/D6Z1 Loss of 6q
PTEN/D10Z1* Loss 10q

CONGENITAL MESOBLASTIC NEPHROMA

ETV6 Rearrangement t(12;v)

GASTROINTESTINAL TUMOUR

MAF/IGH Loss of 14
BCR/ABL1 Loss of 22

GLIOMA HIGH GRADE / GLIOBLASTOMA MULTIFORME

1p36/1q25 Loss of 1p
19p/19q Loss of 19q
EGFR/D7Z1 Amplification of EGFR
PTEN/D10Z1* Loss of 10q
CDKN2A/D9Z3* Loss of 9p
TP53* Loss of 17p

HIBERNOMA

CCND1/IGH@ Loss of 11q
PTEN/D10Z1 Loss of 10q

INFLAMMATORY MYOFIBROBLASTIC TUMOUR

ALK Rearrangement t(2;v)

LIPOBLASTOMA

MYC/D8Z1/IGH@ Polysomy 8

LIPOMA SPINDLE CELL / PLEOMORPHIC

13/21 Loss of 13q
IGH@/MAF Loss of 16q
D13S319/LAMP1/D12Z3* Loss of 13q

LUNG CANCER

EGFR/D7Z1 Amplification of EGFR

LYMPHOMA ANAPLASTIC LARGE CELL

ALK Rearrangement t(2;v)

LYMPHOMA BURKITT

MYC Rearrangement t(8;v)
MYC/D8Z1/IGH@ Rearrangement t(8;14)

LYMPHOMA BURKITT / DLBCL PANEL

MYC Rearrangement t(8;v)
MYC/D8Z1/IGH@ Rearrangement t(8;14)
BCL2 Rearrangement t(18;v)
BCL6 Rearrangement t(3; v)

LYMPHOMA DIFFUSE LARGE B CELL

BCL2 Rearrangement t(18;v)
BCL6 Rearrangement t(3;v)

LYMPHOMA FOLLICULAR

BCL2 Rearrangement t(18;v)

LYMPHOMA GENERAL PANEL

BCL2 Rearrangement t(18;v)
BCL6 Rearrangement t(3;v)
CCND1/IGH@ Rearrangement t(11;14)
MYC Rearrangement t(8;v)

LYMPHOMA MANTLE CELL

CCND1/IGH@ Rearrangement t(11;14)

LYMPHOMA MALT CELL

MALT1 Rearrangement t(18;v)

LYMPHOMA T CELL LEUKEMIA

TCR α/δ Rearrangement t(14;v)
TCR β Rearrangements of t(7;v)
TCR γ Rearrangements of t(7;v)
MYC Rearrangement t(8;v)

MEDULLOBLASTOMA

MYC/D8Z1/IGH@ Amplification of MYC
ERBB2/TOP2A/D17Z1* Imbalance i(17q)

MELANOMA

MYB/D6Z1 Aneusomy of 6q
CCND1 Aneusomy of 11q

MENINGIOMA

EWSR1 Monosomy 22
BCR/ABL1 Monosomy 22

MESOTHELIOMA

CDKN2A/D9Z3 Loss of 9p
MYB/D6Z1 Loss of 6q

MISCELLANEOUS SINGLE PROBE

Clinically relevant prognostic markers

NEUROBLASTOMA

MYCN/D2Z1 Amplification of MYCN
1p36/1q25 Loss of 1p
ERBB2/TOP2A/D17Z1 Imbalance i(17q)

OLIGODENDROGLIOMA

1p36/1q25 Loss of 1p
19p/19q Loss of 19q

POC HYDROPIC ABORTUS

X/Y/18 Aneuploidy X, Y, 18
13/21 Aneuploidy 13, 21
IGH@/MAF Aneuploidy 14, 16
PML/RAR α Aneuploidy 15, 17
BCR/ABL1 Aneuploidy 9, 22

POC PLOIDY

X/Y/18 Aneuploidy X, Y, 18
13/21 Aneuploidy 13, 21

PLEUROPULMONARY BLASTOMA

MYCN Gain of 2q
MYC/D8Z1/IGH@ Gain of 8
D20S108 Gain of 20
PTEN/D10Z1* Loss of 10q

RENAL CELL CHROMOPHOBE

1p36/1q25 Loss of 1p
13/21 Loss of 13q
ERBB2/D17Z1/TOP2A* Loss of 17*
MYCN/D2Z1* Loss of 2*

RENAL CLEAR CELL CARCINOMA

EGFR/D7Z1 Loss of 7
ERBB2/D17Z1/TOP2A Loss of 17

RENAL ONCOCYTOMA

1p36/1q25 Loss of 1p

RENAL PAPILLARY CELL CARCINOMA

EGFR/D7Z1 Aneuploidy 7
ERBB2/D17Z1/TOP2A Aneuploidy 17

RHABDOID TUMOUR

BCR/ABL1 Loss of 22q11
HIRA/ARSA Loss of 22

SARCOMA CLEAR CELL

EWSR1 Rearrangement of 22

SARCOMA DESMOPLASTIC SRC TUMOUR

EWSR1 Rearrangement of 22

SARCOMA EWING'S / PPNET

EWSR1 Rearrangement of 22

SARCOMA EXTRASKELETAL CHONDROSARCOMA

EWSR1 Rearrangement of 22

SARCOMA FIBROMYXOID

FUS Rearrangement t(7;16)

SARCOMA FIBROSARCOMA, INFANTILE

ETV6 Rearrangement t(12;15)

SARCOMA LIPOSARCOMA MYXOID / ROUND CELL

DDIT3 Rearrangement t(12;16)
EWSR1* Rearrangement of 22

SARCOMA LIPOSARCOMA WELL- DIFFERENTIATED /D DIFFERENTIATED

MDM2 Amplification of MDM2
GLI1* Amplification of GLI1

SARCOMA RHABDOMYOSARCOMA ALVEOLAR

FOXO1 Rearrangement of 13

SARCOMA RHABDOMYOSARCOMA EMBRYONAL

MYC/D8Z1/IGH@ Trisomy 8
MDM2 Trisomy 20
MYCN Trisomy 2

SARCOMA SYNOVIAL

SS18 Rearrangement t(18;v)

SCHWANNOMA

EWSR1 Monosomy 22
BCR/ABL1 Monosomy 22

SEX DETERMINATION

X/Y XX/XY

TRANSITIONAL CELL CARCINOMA

D3Z1 Aneusomy for 3
EGFR/D7Z1 Aneusomy for 7
ERBB2/D17Z1 Aneusomy for 17
CDKN2A/D9Z3 Aneusomy for 9

TESTICULAR GERM CELL TUMOUR

ETV6/D12Z1 Imbalance i(12p)

IGENZ

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*Probes will only be added in consultation with the referring clinician

HAEMATOLOGICAL PRENATAL AND POSTNATAL TESTS AVAILABLE

HAEMATOLOGICAL

AML	
RUNX1T1/RUNX1	Rearrangement of t(8;21)
MLL	Rearrangement of t(11;v)
PML/RAR α	Rearrangement of t(15;17)
CBF β	Rearrangement of t(16;v)
EGR1/D5S721	Monosomy or loss 5/5q-
D7S486/D7Z1	Monosomy or loss 7/7q-

MPD	
BCR/ABL1	Rearrangements of t(9;22)
EGR1/D5S721	Monosomy or loss 5/5q-
D7S486/D7Z1	Monosomy or loss 7/7q-
D20S108	Monosomy or loss 20/20q-
D13S319/LAMP1/D12Z1*	Monosomy or loss 13/13q-
PDGFR α *	Rearrangement of 4q12

MDS	
EGR1/D5S721	Monosomy or loss 5/5q-
D7S486/D7Z1	Monosomy or loss 7/7q-
RUNX1T1/RUNX1	Trisomy 8
D20S108	Monosomy or loss 20/20q-

CHILDHOOD ALL	
MYC	Rearrangement of t(8;v)
BCR/ABL1	Rearrangement of t(9;22)
MLL	Rearrangement of t(11;v)
ETV6	Rearrangement of t(12;v)
MYB/D6Z1	Loss - del(6q)

ADULT ALL	
D7S486/D7Z1	Monosomy or loss 7/7q-
MYC/D8Z1/IGH@	Trisomy 8
CDKN2A/D9Z3	Loss - del(9p)
BCR/ABL1	Rearrangement of t(9;22)
MLL	Rearrangement of t(11;v)

CLL PANEL	
ATM/TP53	Loss of 11q22
	Loss of 17p13
D13S319/LAMP1/D12Z1	Loss of 13q14
	Gain of 12

HYPEREOSINOPHILIC SYNDROME	
PDGFR	Rearrangement of inv(4)
ETV6	Rearrangement of t(12;v)

LYMPHOMA	
ALK	Rearrangement t(2;v)
BCL2	Rearrangement t(18;v)
BCL6	Rearrangement t(3;v)
CCND1/IGH@	Rearrangement t(11;14)
MYC	Rearrangement t(8;v)
MALT1	Rearrangement t(18;v)

MYELOMA PANEL	
Targeted plasma cell analysis	
D13S319/LAMP1/D12Z1	Loss of 13q14
CCND1/IGH@	Rearrangement t(11;14)
FGFR3/IGH@	Rearrangement t(4;14)
IGH@/MAF	Rearrangement t(14;16)
TP53	Loss of 17p13
BCR/ABL1*	Hypodiploidy
PML/RAR α *	Hyperdiploidy

LYMPHOMA T CELL LEUKEMIA	
TCR α/δ	Rearrangement t(14;v)
TCR β	Rearrangements of t(7;v)
TCR γ	Rearrangements of t(7;v)
MYC	Rearrangement t(8;v)

BONE MARROW TRANSPLANT	
Chimerism studies	
X/Y	XX/XY

MINIMAL RESIDUAL DISEASE SCREENING	
Various probes	Various

CLL ARRAY	
Clinically relevant prognostic markers	

DIAGNOSTIC DISEASE SCREENING	
Various probes	Various

PRENATAL

ANEUSCREEN	
X/Y/18	Aneuploidy X, Y, 18
13/21	Aneuploidy 13, 21

LOSS OF PREGNANCY SCREEN	
X/Y/18	Aneuploidy X, Y, 18
13/21	Aneuploidy 13, 21
IGH@/MAF	Aneuploidy 14, 16
PML/RAR α	Aneuploidy 15, 17
BCR/ABL1	Aneuploidy 9, 22

POSTNATAL

VCFS / DI GEORGE	
HIRA/ARSA	Loss of 22q11 or 22q13

WOLF HIRSCHHORN	
WHSCR	Loss of 4p

CRI DU CHAT	
D5S721/D5S23	Loss of 5p

RETINOBLASTOMA	
RB1	Loss of 13q14

MENTAL RETARDATION / DYSMORPHISM CONSTITUTIONAL ARRAY	
Congenital syndromes	61 Specific syndromes

CYTOGENETICS

BONE MARROW	
Set up	
Report	

TUMOUR	
Set up	
Report	

PRENATAL	
Set up	
Report	

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