



**Department of Cytogenetics & Molecular Cytogenetics
Fluorescent in situ Hybridization [FISH] & Karyotyping**

Prenatal Diagnosis: FISH-Amniotic fluid/CVS

	Probe details	Result	Price
1	Chromosome 13 LSI	1-3 days	4800
2	Chromosome 21 LSI	1-3 days	4800
3	Chromosome 18 CEP	1-3 days	4800
4	Chromosome CEP X/Y	1-3 days	4800
5	Chromosome 13/21 or 13/18 or 18/21	1-3 days	6600
6	Chromosome 13/18/21	1-3 days	7800
7	Chromosome 13/18/21/X/Y	1-3 days	9000

Microdeletion Syndromes [FISH]: Peripheral blood in sodium Heparin

1	Di-George syndrome (TUPLE) 22q deletion	3-5 days	4800
2	Prader-Willi/Angelman syndrome	3-5 days	4800
3	William syndrome	3-5 days	4800
4	SRY	3-5 days	4800
5	1p36 deletion	3-5 days	4800
6	Alpha Satellite X	3-5 days	4800
7	Miller-Dieker syndrome 1	3-5 days	4800
8	Miller-Dieker syndrome 2 /Isolated Lissencephaly sequence	3-5 days	4800
9	Smith-Magenis syndrome	3-5 days	4800
10	Di-George syndrome 2 @ 10p14	3-5 days	4800
11	Cri-Du-Chat syndrome	3-5 days	4800
12	SOTOS syndrome	3-5 days	4800
13	Di-George syndrome TBX	5 days*	4800

Oncology [FISH]: Bone marrow or peripheral blood in sodium Heparin

1	bcr/abl t(9;22) Ph [CML/ALL]	3 days	4800
2	pml/rara t(15;17) AML-M3	3 days	4800
3	RARA Breakapart probe AML-M3	3 days	4800
4	X/Y Post BMT chimerism	3 days	4800
5	ETV(TEL)/(RUNX1(AML1) t(12;21) ALL	3 days	4800
6	MLL break apart 11q23 [ALL & AML]	3 days	4800
7	AML1/ETO t(8;21) AML	3 days	4800
8	[ALL Panel] bcr/abl t(9;22), TEL(ETV)/AML1(RUNX1) t(12;21) & MLL 11q23]	3-4 days	10500
9	[AML PANEL] AML1/ETO t(8;21)/CBFB/MYH11 inv(16)	3-4 days	7800
10	[MDS PANEL] del5q31.2 EGR1/5p15.31C, 7q22/q31 RFLN/TES, 20q12/q13.12 PTRPT/MYBL2 + CEP 8	3-5 days	10500
11	[CLL Panel] P53 17p13.1/ATM 11q22.3 and D13S319 13q22.3/13qter/12cen/MYB 6q23	3-5 days	10800
12	[Multiple Myeloma Panel] [4 probe-5 gene loci] CDKN2C 1p32.3/CKS1B 1q21/D13S319 13q14.2/IGH 14q32.33/p53 17p13.1	3-5 days	11520
13	IGH/MYC t(8;14) ALL-L3 (Bukitt's Lymphoma)	3 days	4800



Fluorescent in situ Hybridization [FISH] & Karyotyping contd...

14	IGH break apart t(14q32;V)	3 days	4800
15	IGH/CCND1 t(11;14) (Mantle cell lymphoma)	5 days*	5400

Solid Tumors [Tissue FISH]

16	HER2-neu Breast Carcinoma	7 days	10200
17	EGFR amplification	7 days	10200
1	Spectral Karyotyping [24 color painting]	10 days*	12000

PCR method: EDTA whole blood

1	Fragile X	14-21 days*	4200
2	Y microdeletion	14-21 days*	4200
3	SRY by PCR [XY sex-reversal]	3-4 week*	4200

KARYOTYPING:

1	Bone marrow aspirate/blood in sodium Heparin for oncology	5 days	5400
2	Peripheral blood in sodium Heparin	7 days	4800
3	Amniotic fluid in BD syringe (No additives)	14 days	6600
4	Stem cells culture in TC flask/Petridish	5 days	6600

Note: Turnaround time specified are in working days

STAR* indicate test outsourced to Centre for Human Genetics

Sample Collection and Transport

Sample to be stored and transported at room temperature to the lab in 24-48 hrs

1. Clinical Cytogenetics:

2 ml of peripheral blood in sterile sodium heparin vacutainer (Green top)

2. Cancer Cytogenetics: Leukemia

2 ml of bone marrow aspirate in sodium heparin

Peripheral blood (for CML or >70% blasts in PS for acute leukemia) in a vacutainer.

3. Prenatal Cytogenetics:

(a) Amniotic fluid: Karyotyping & FISH

15-20 ml in sterile BD syringes/centrifuge tubes and transported at room temperature.

(b) Chorionic villi: FISH

20 mg of villi in tissue culture medium. (Available from the lab on request).

(c) Cord blood: Karyotyping & FISH

2 ml of peripheral blood in sterile sodium heparin vacutainer (Green top)

Verification to be done at source that the blood is fetal and not maternal.