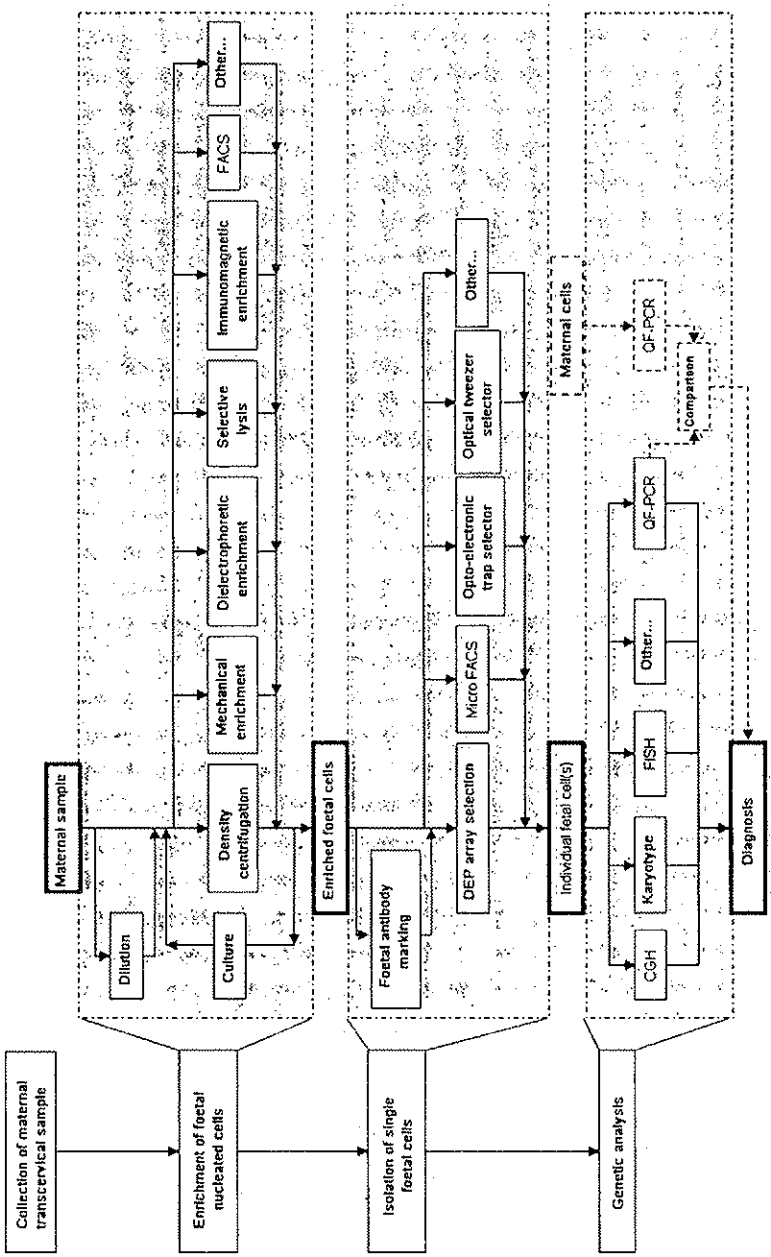

Collection of maternal transcervical sample
Enrichment of foetal nucleated cells
Isolation of single foetal cells
Genetic analysis
Maternal sample
Dilution
Culture
Density centrifugation
Mechanical enrichment
Dielectrophoretic enrichment
Selective lysis
Immunomagnetic enrichment
FACS
Other...
Enriched foetal cells
Foetal antibody marking
DEP array selection
Micro FACS
Opto-electronic trap selector
Optical tweezer selector
Other...
Individual foetal cell(s)
Maternal cells
QF-PCR
Comparison
QF-PCR
Other...
FISH
Karyotype
CGH
Diagnosis

Fig. 1

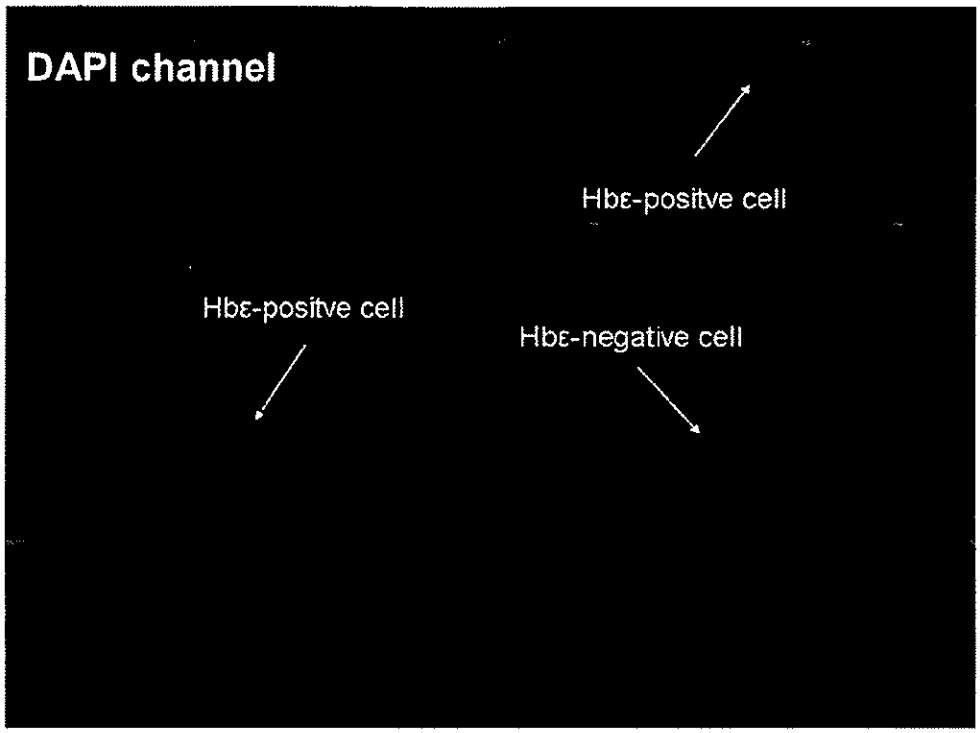

DAPI channel
Hbε-positve cell
Hbε-positve cell
Hbε-negative cell

Fig. 2

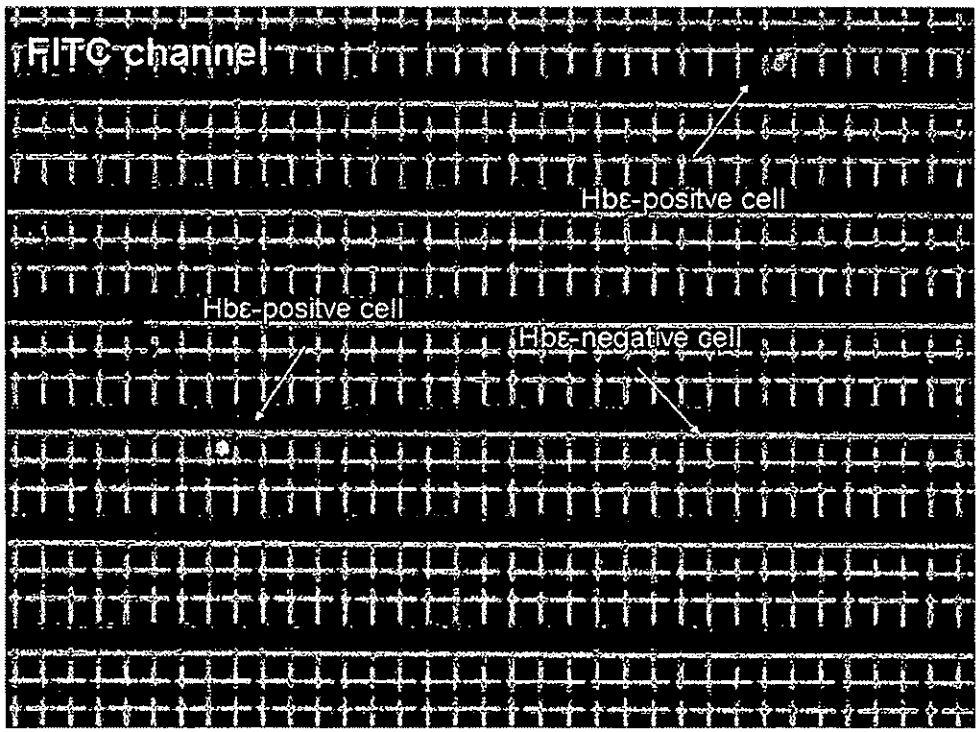

FITC channel
Hbε-positve cell
Hbε-positve cell
Hbε-negative cell

Fig. 3

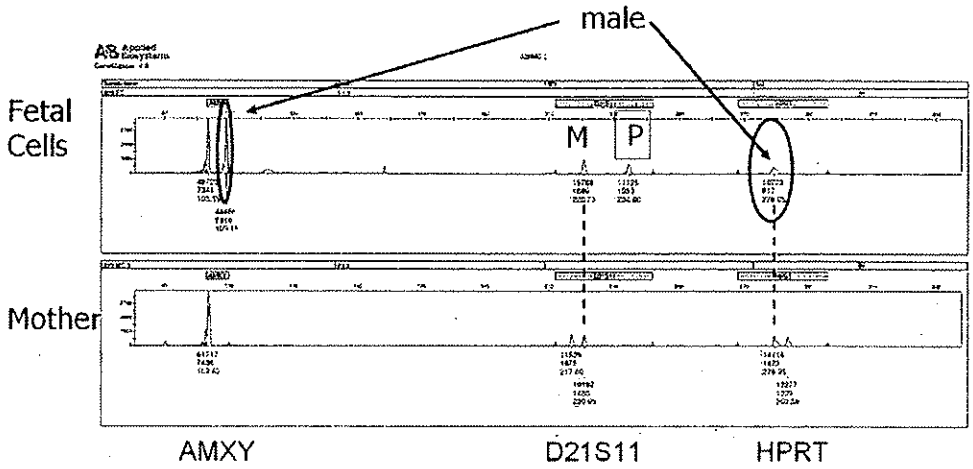

male
Fetal Cells
Mother
M
P
AMXY
D21S11
HPRT

Fig. 4

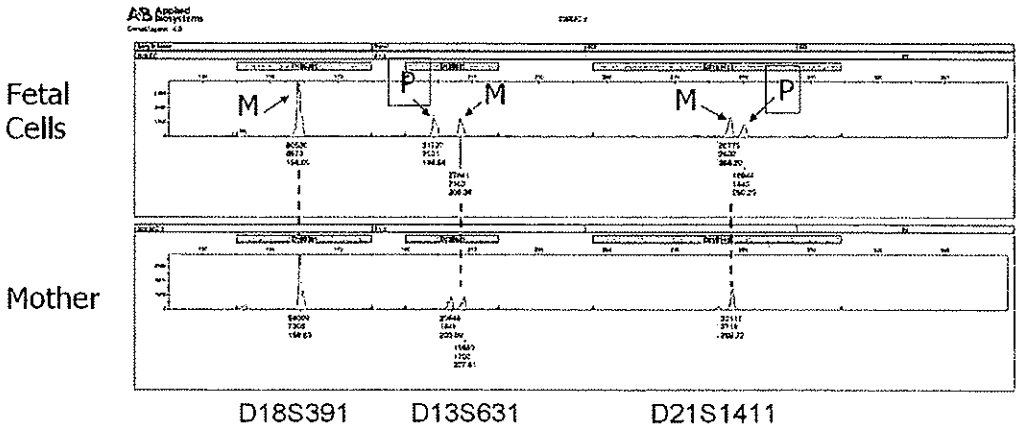

Fetal Cells
Mother
M
P
M
M
P
D18S391
D13S631
D21S1411

Fig. 5

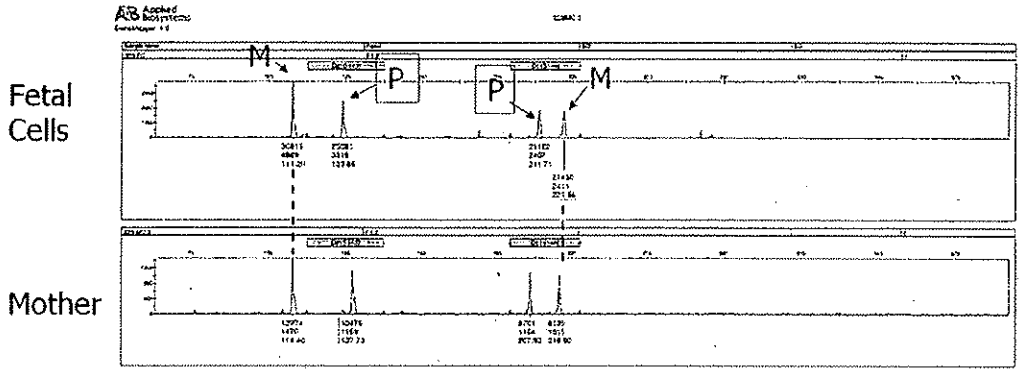

Fetal Cells
Mother
M
P
P
M
D21S1437
D21S1446

Fig. 6

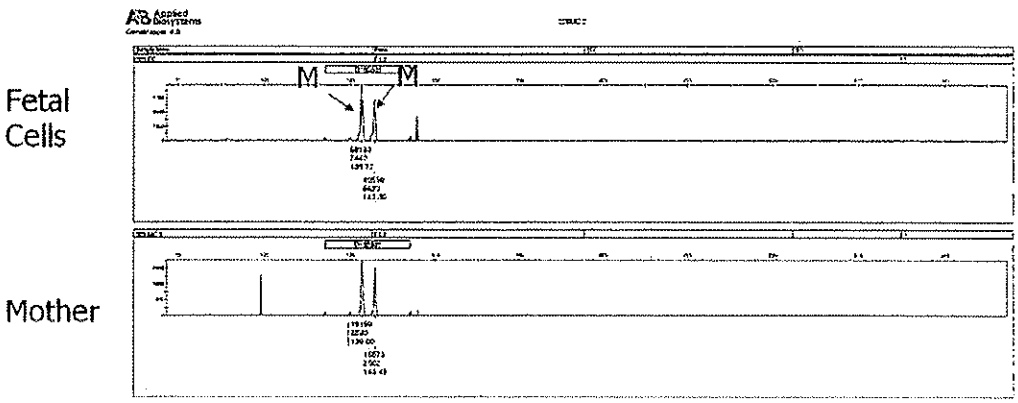

Fetal Cells
Mother
M
M
D18S535

Fig. 7

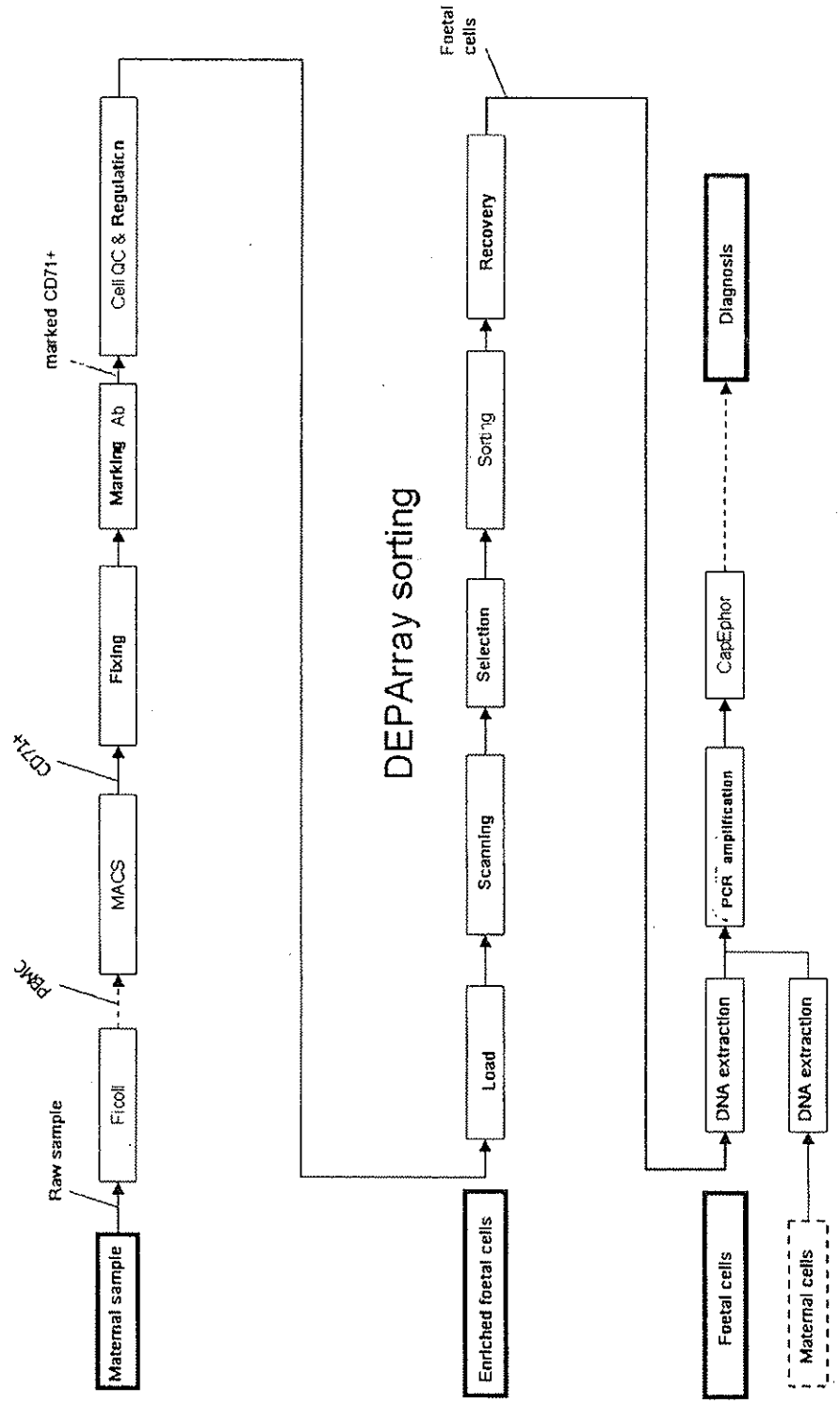

Maternal sample
Raw sample
Ficoll
PBMC
MACS
CD71+
Fixing
Marking Ab
marked CD71+
Cell QC & Regulation
Enriched foetal cells
Load
Scanning
Selection
Sorting
Recovery
Foetal cells
DEPArray sorting
Foetal cells
Maternal cells
DNA extraction
DNA extraction
PCR amplification
CapEphor
Diagnosis

Fig. 8

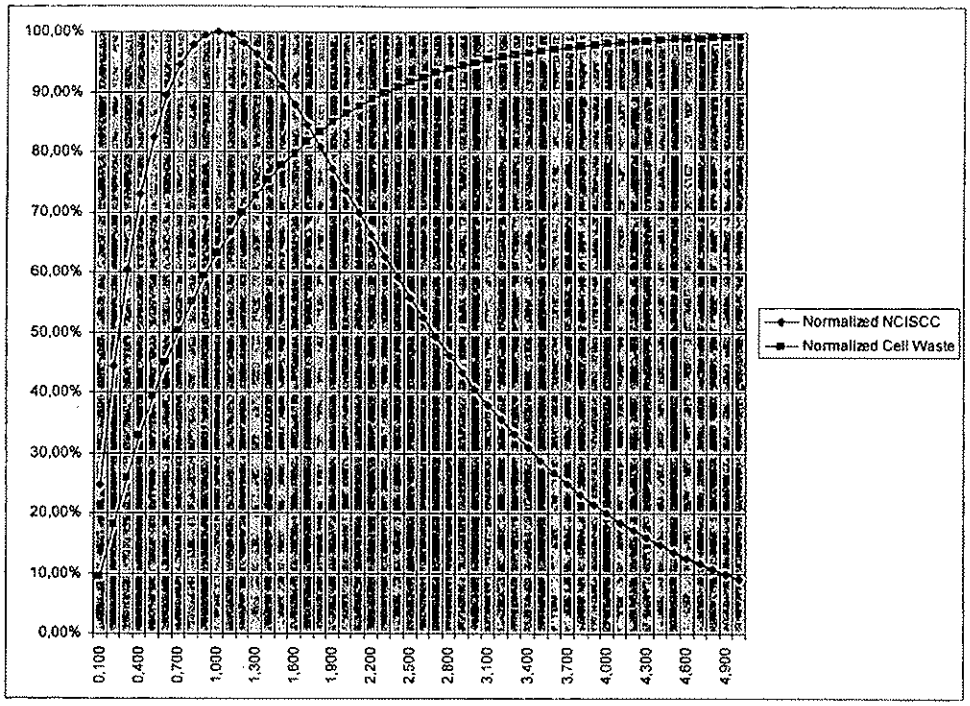

100,00%
90,00%
80,00%
70,00%
60,00%
50,00%
40,00%
30,00%
20,00%
10,00%
0,00%
0,100
0,400
0,700
1,000
1,300
1,600
1,900
2,200
2,500
2,800
3,100
3,400
3,700
4,000
4,300
4,600
4,900
Normalized NCISCC
Normalized Cell Waste

Fig. 9

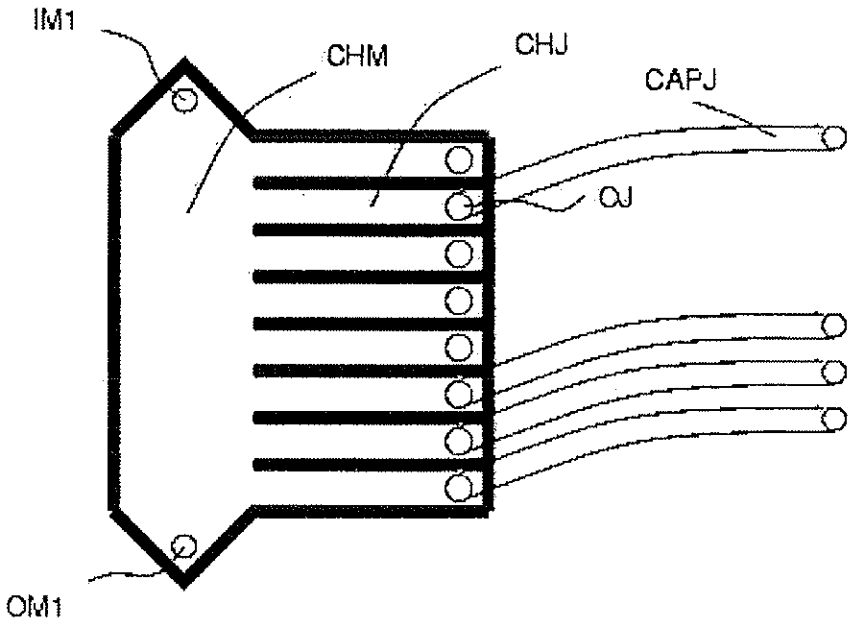

IM1
CHM
CHJ
CAPJ
OJ
OM1

Fig. 10