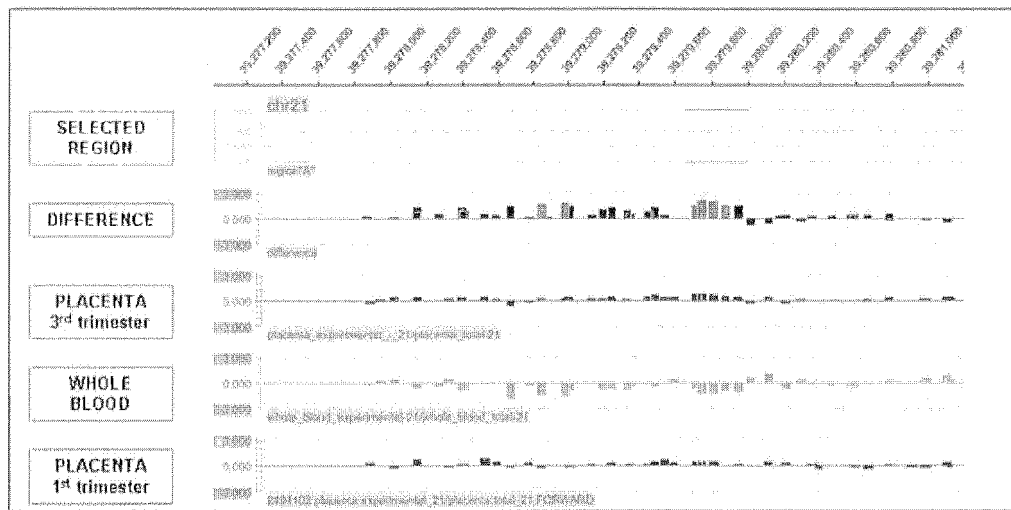


Figure 1



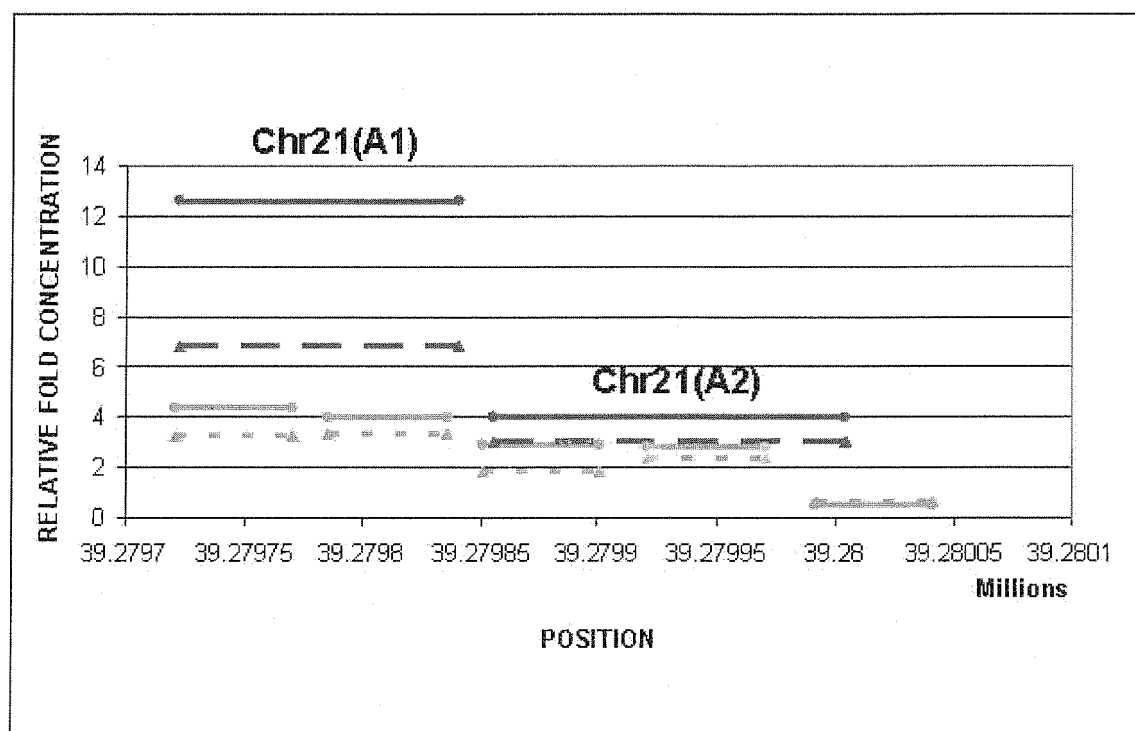


FIGURE 3

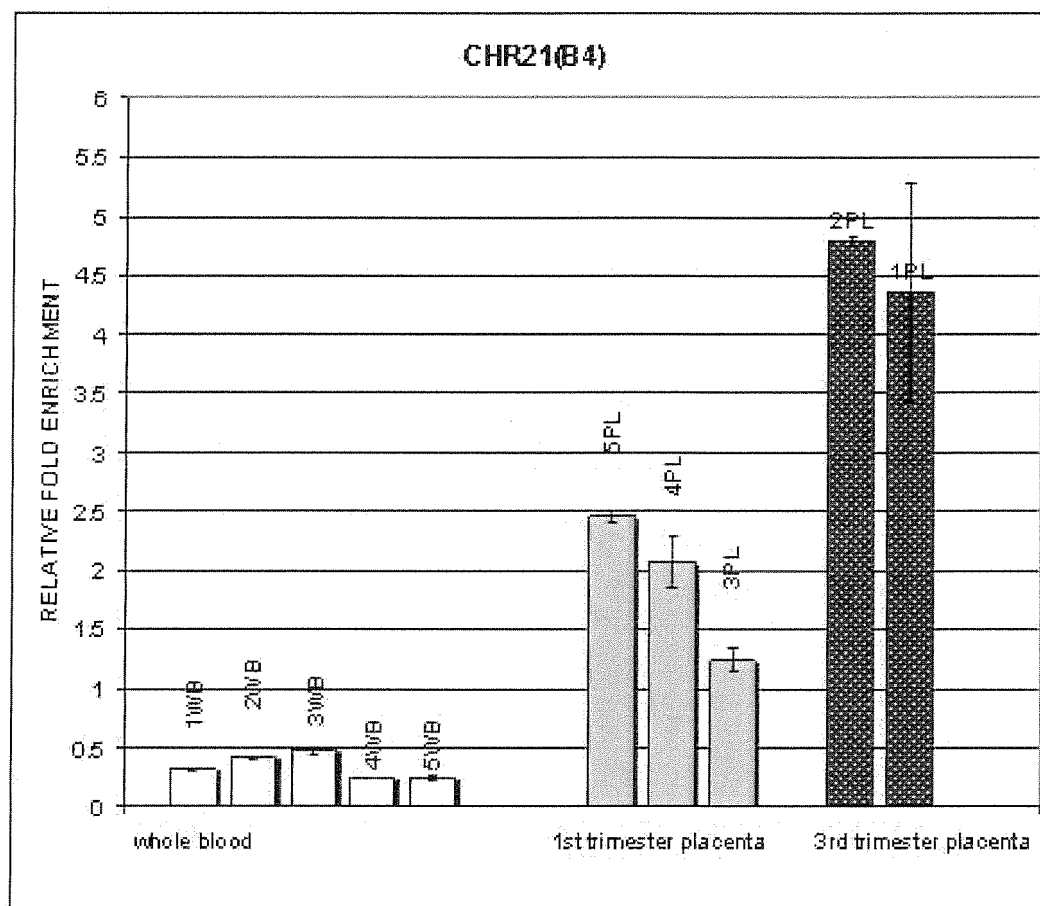
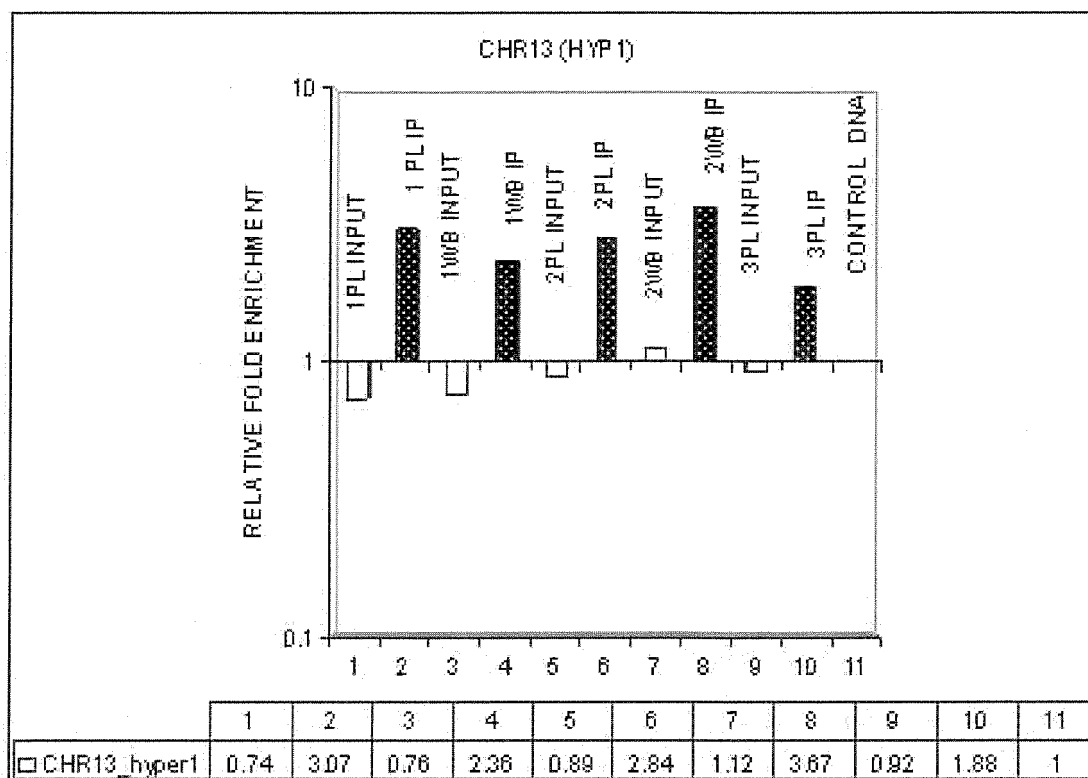


FIGURE 4



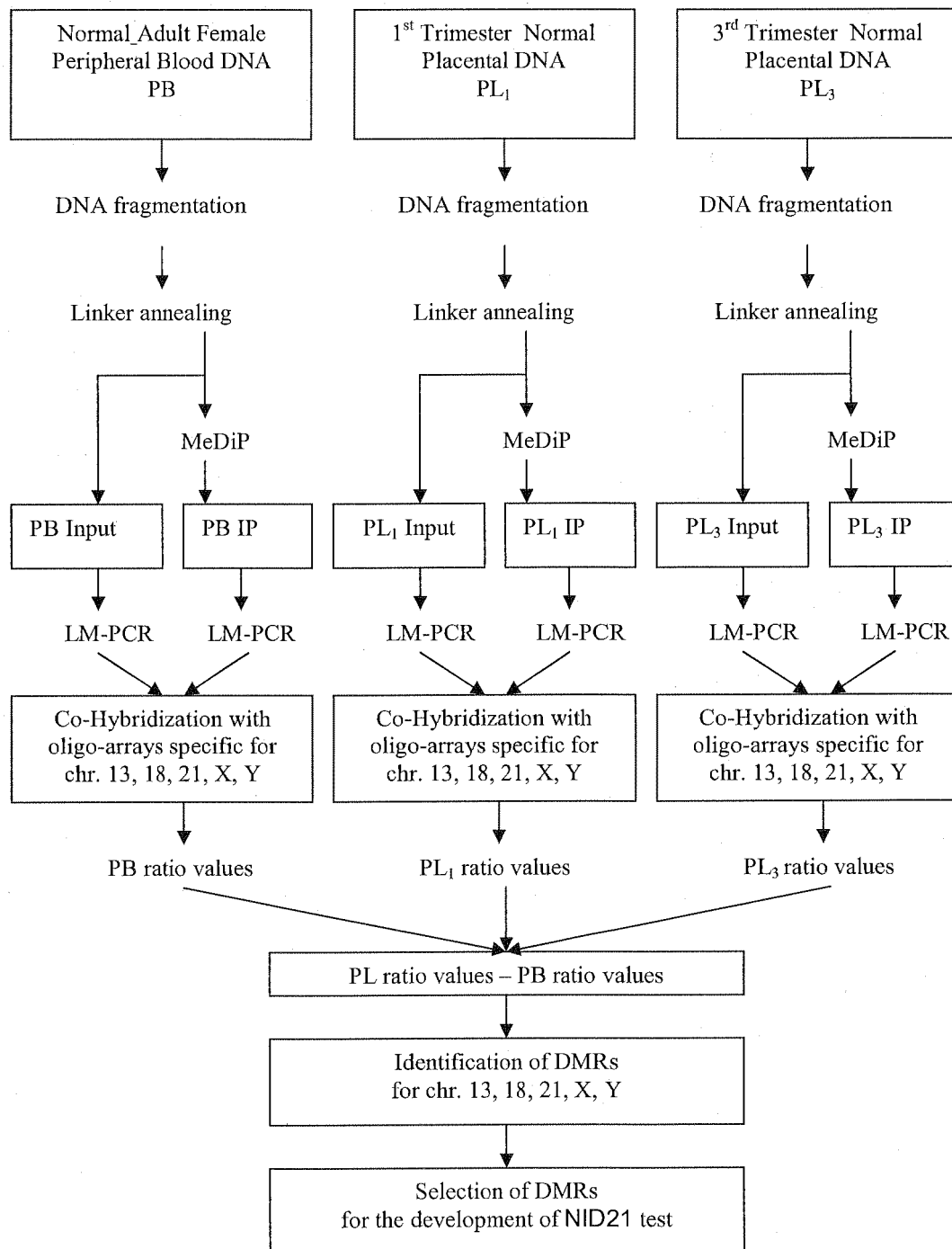


FIGURE 5

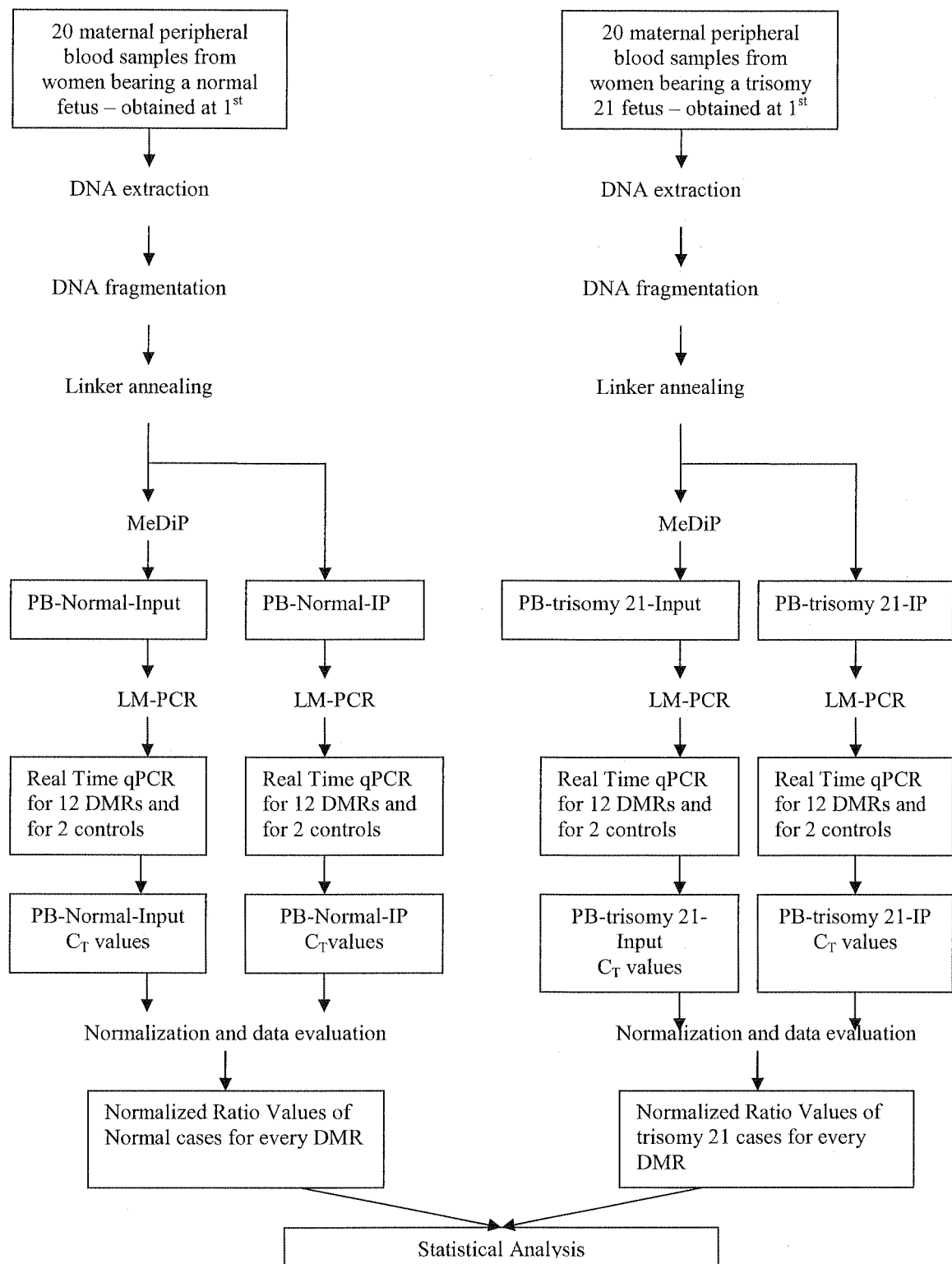


FIGURE 6

Figure 7

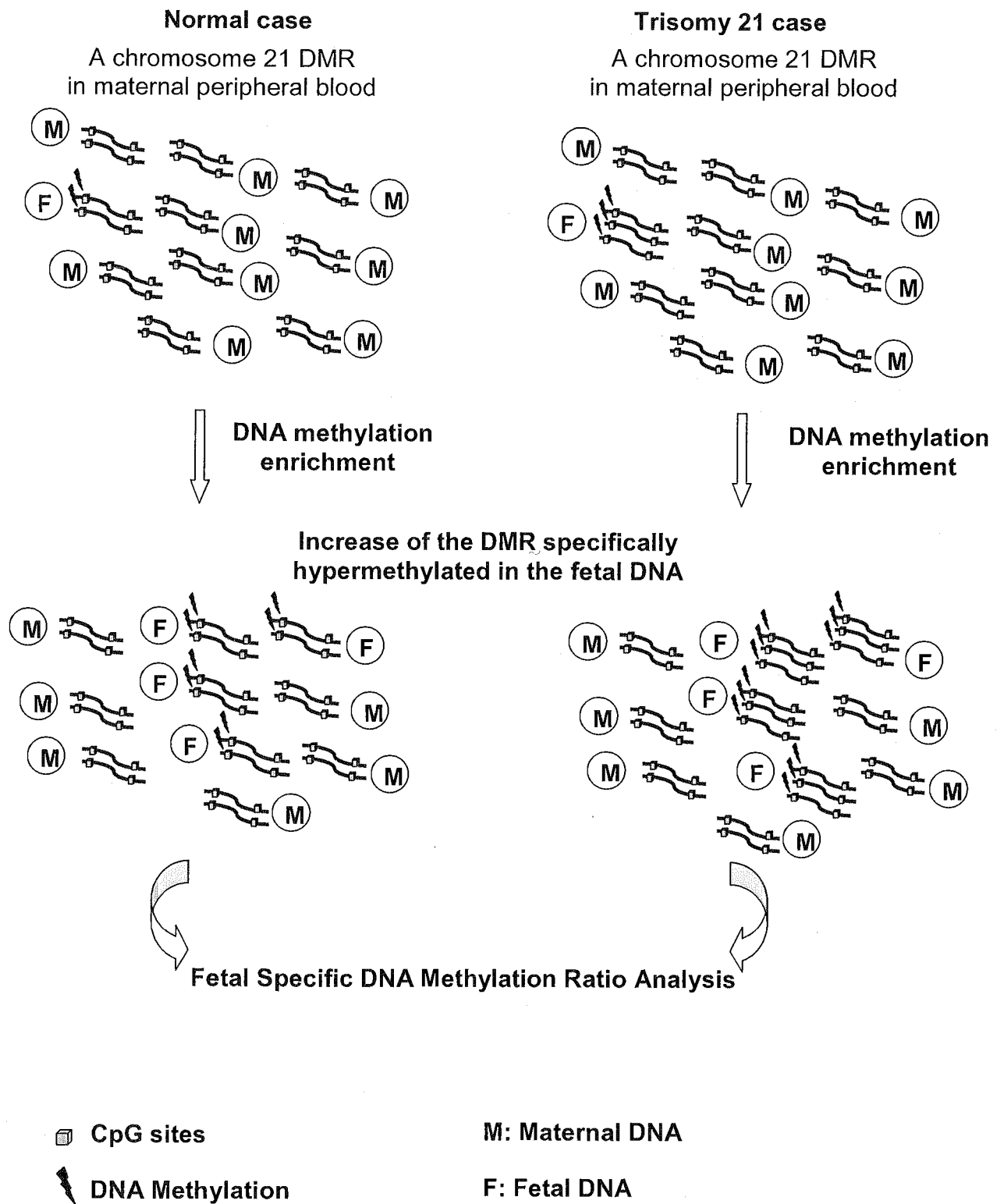
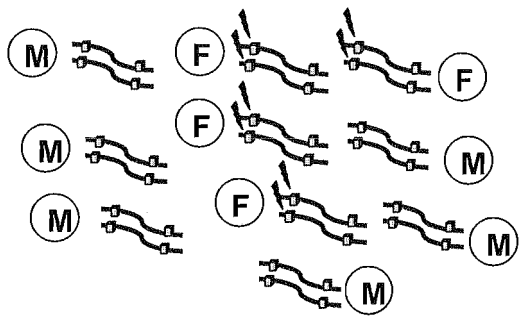
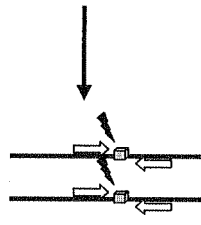


Figure 8

## Normal case

MeDiP products of a DMR which is hypermethylated in the fetal DNA



Real-time  
QPCR

$C_T$  value



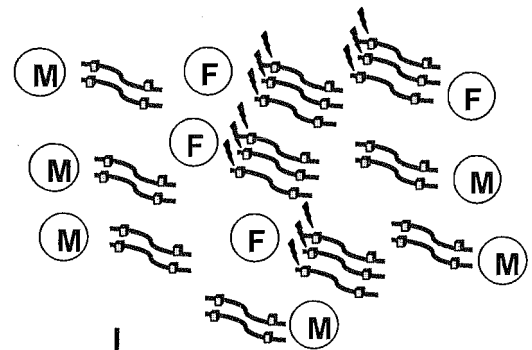
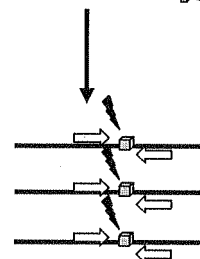
$C_T$  value of normal  
control samples

$$\text{DNA methylation ratio} = \frac{\text{Norm } C_T \text{ normal or Norm } C_T \text{ trisomy 21}}{\text{Median (Norm } C_T \text{ normal controls)}}$$

1 or <1

## Trisomy 21 case

MeDiP products of a DMR which is hypermethylated in the fetal DNA



Real-time  
QPCR

$C_T$  value



$C_T$  value of normal  
control samples

$$\text{DNA methylation ratio} = \frac{\text{Norm } C_T \text{ normal or Norm } C_T \text{ trisomy 21}}{\text{Median (Norm } C_T \text{ normal controls)}}$$

>1

 CpG sites

 DNA Methylation

M: Maternal DNA

F: Fetal DNA

Figure 9

