Figure 1

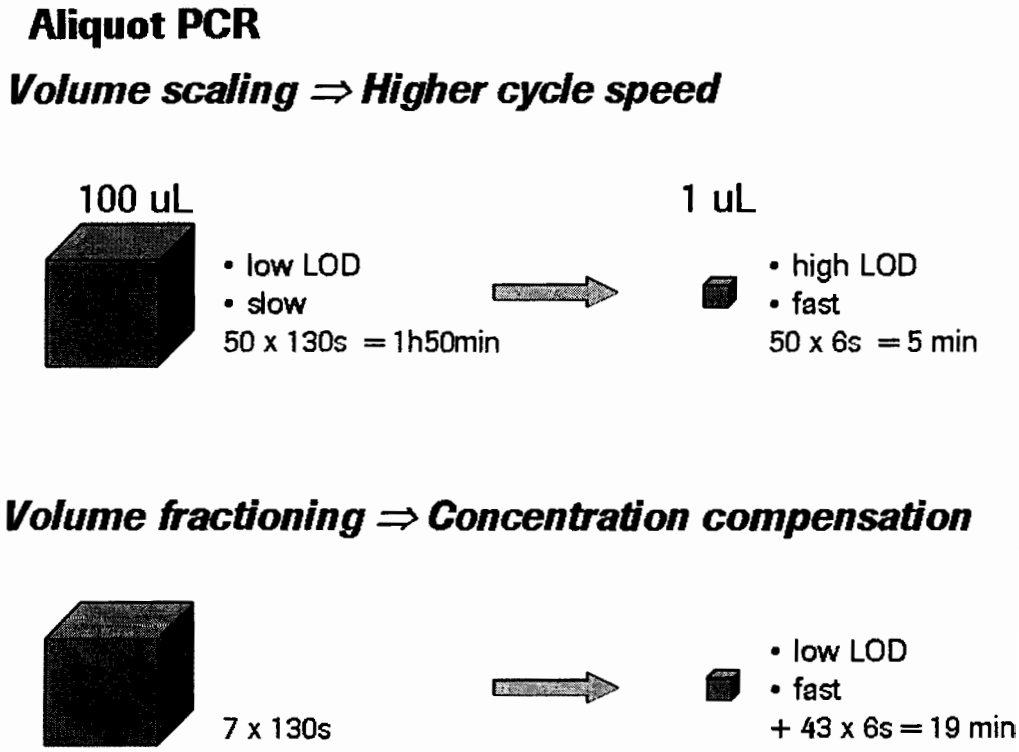

Aliquot PCR
Volume scaling ⇒ Higher cycle speed
100 uL
• low LOD
• slow
50 x 130s = 1h50min
1 uL
• high LOD
• fast
50 x 6s = 5 min
Volume fractioning ⇒ Concentration compensation
7 x 130s
• low LOD
• fast
+ 43 x 6s = 19 min

Figure 2

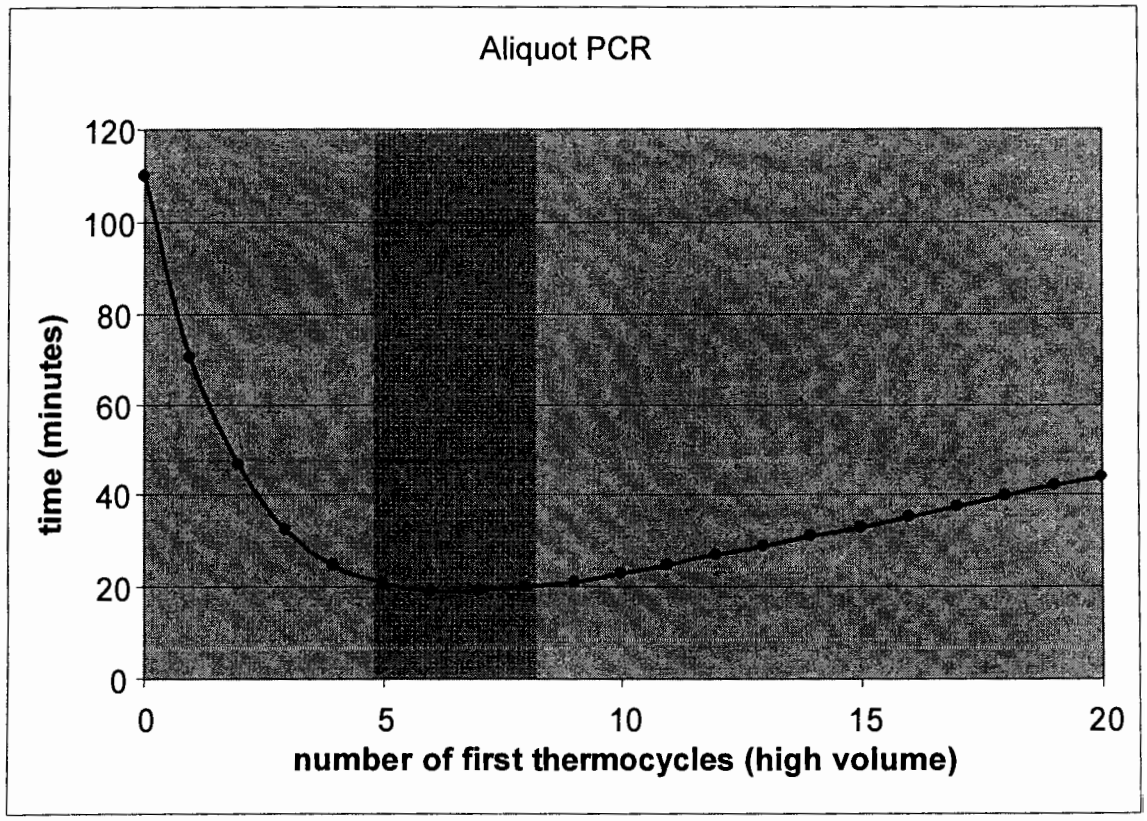

Aliquot PCR
120
100
80
60
40
20
0
time (minutes)
0
5
10
15
20
number of first thermocycles (high volume)

Figure 3

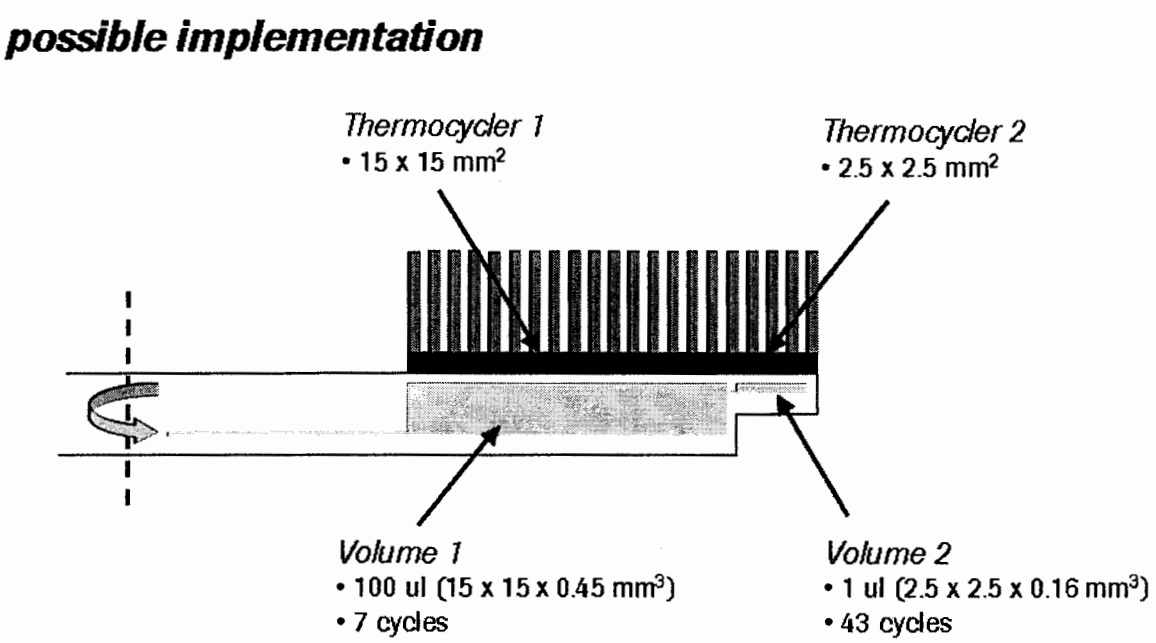


Figure 4

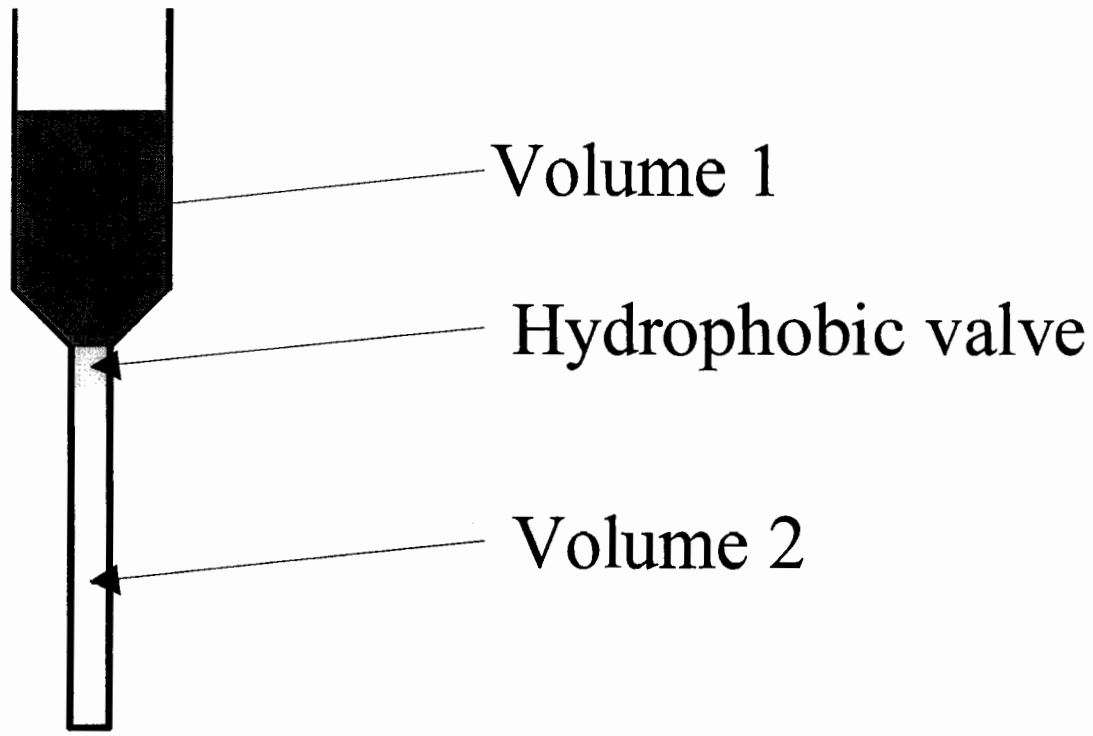
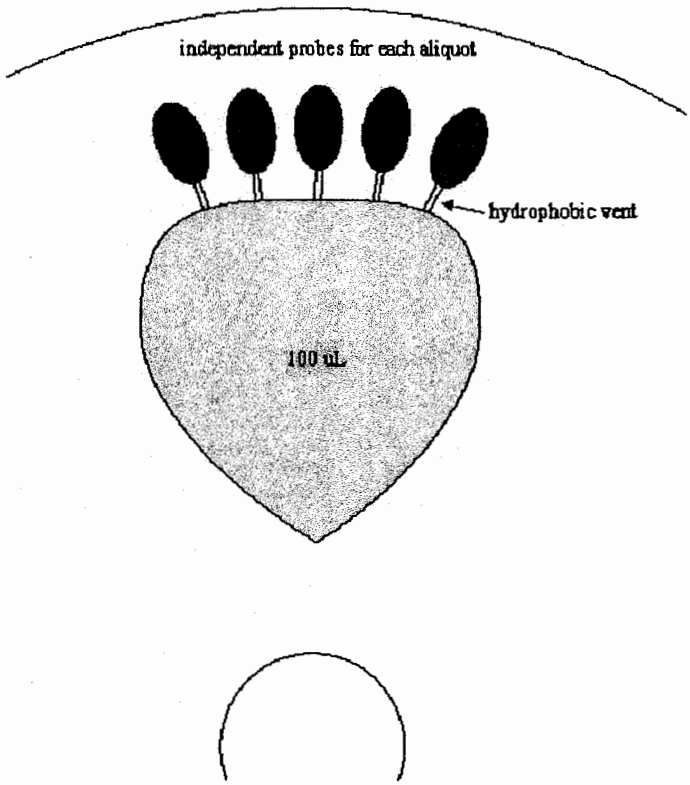


Figure 5


independent probes for each aliquot
hydrophobic vent
100 uL