Figure 1A

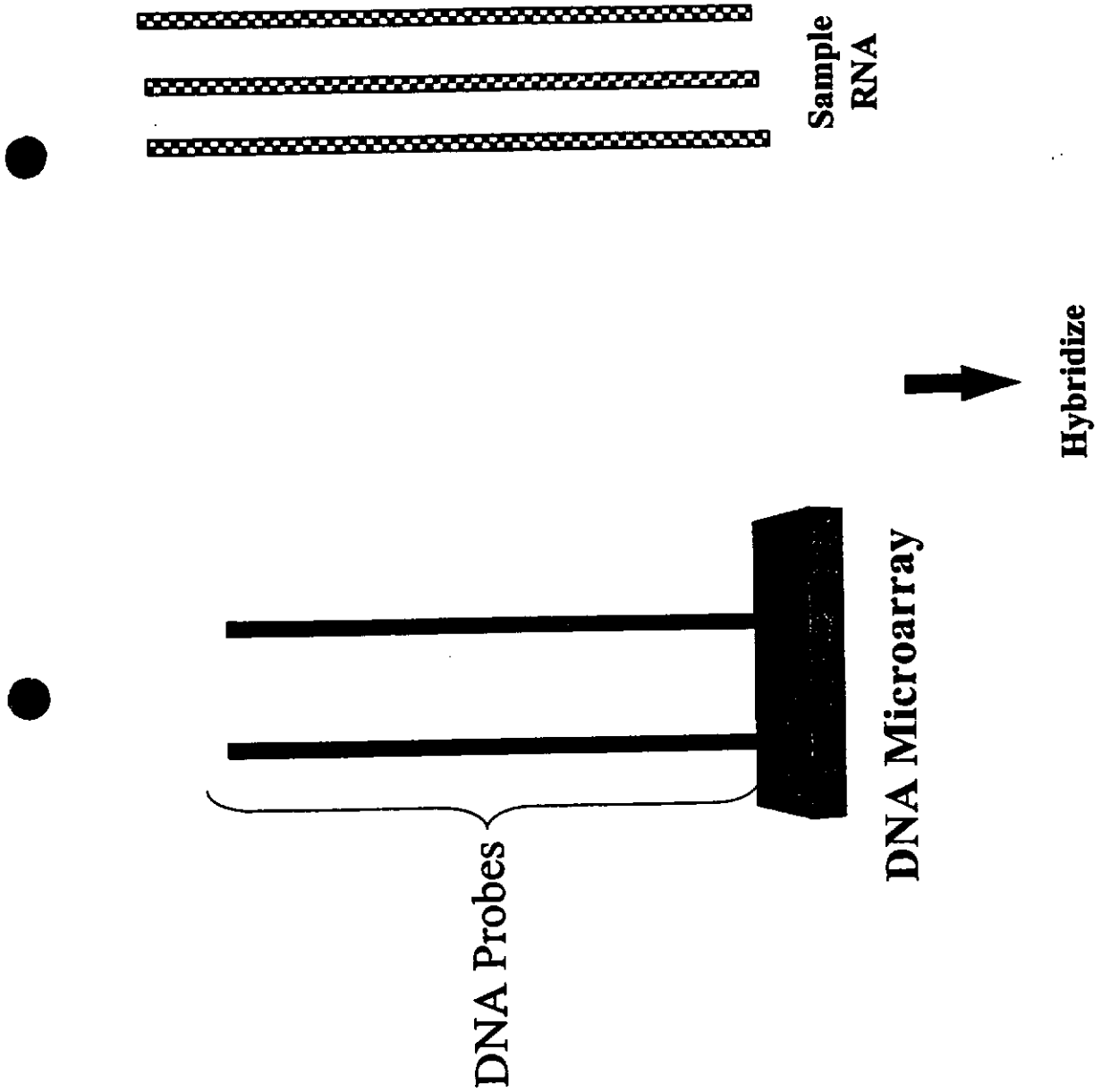
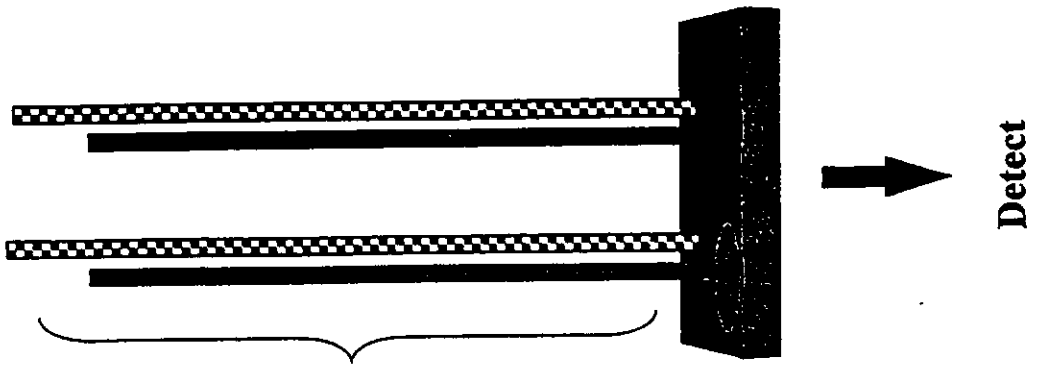


Figure 1B



RNA:DNA Hybrid

Figure 1C

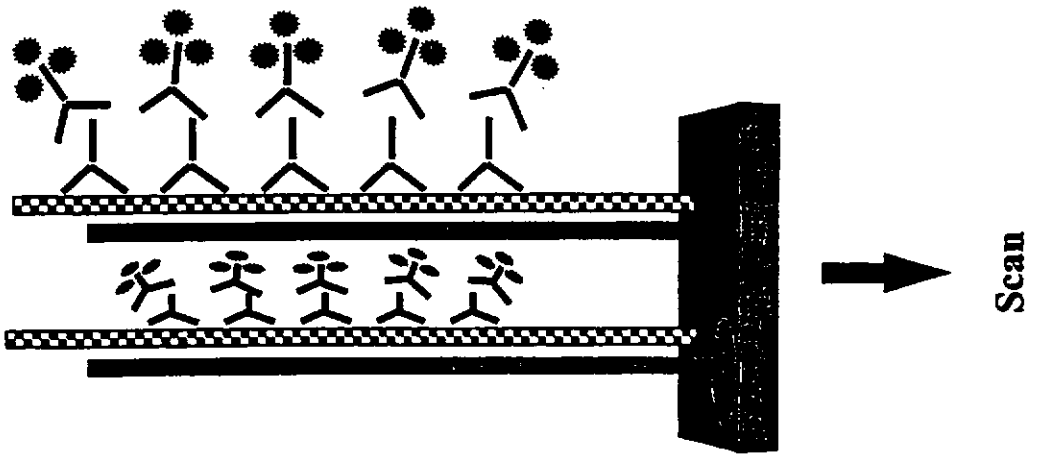
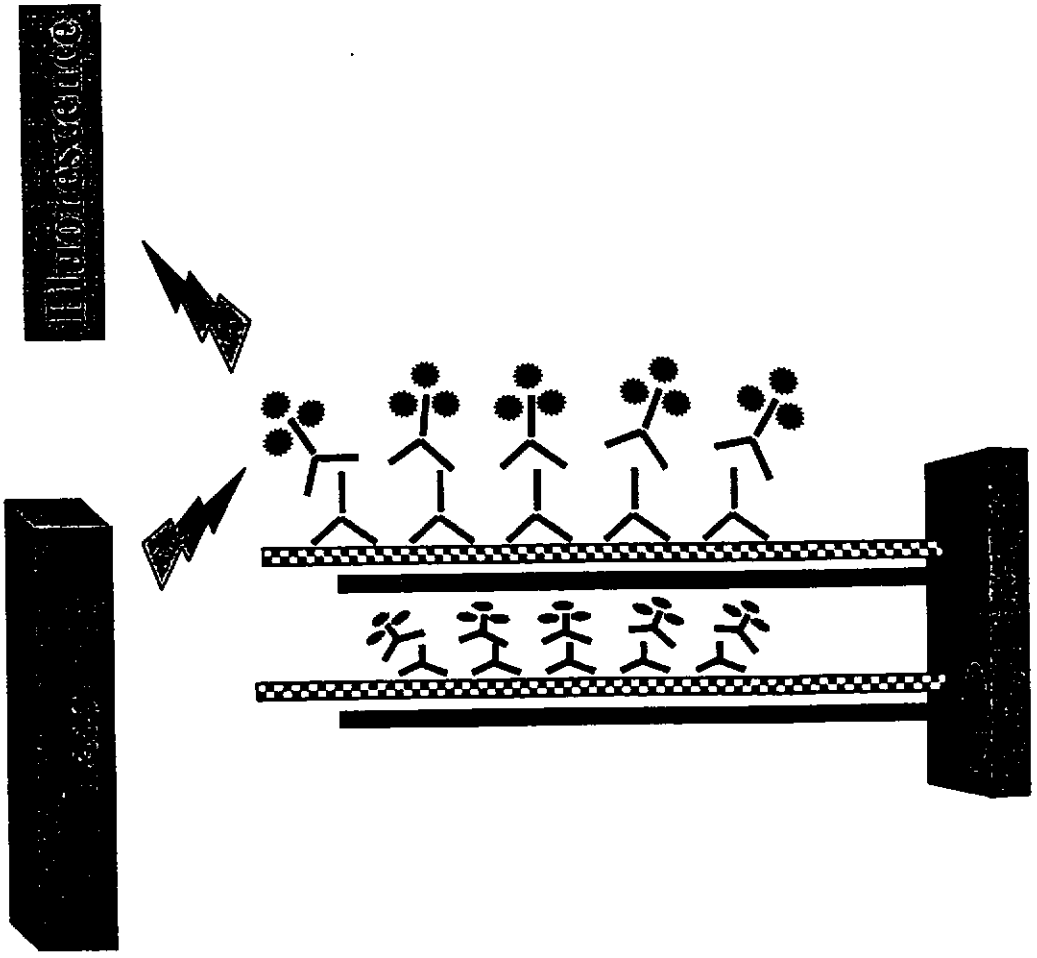


Figure 1D



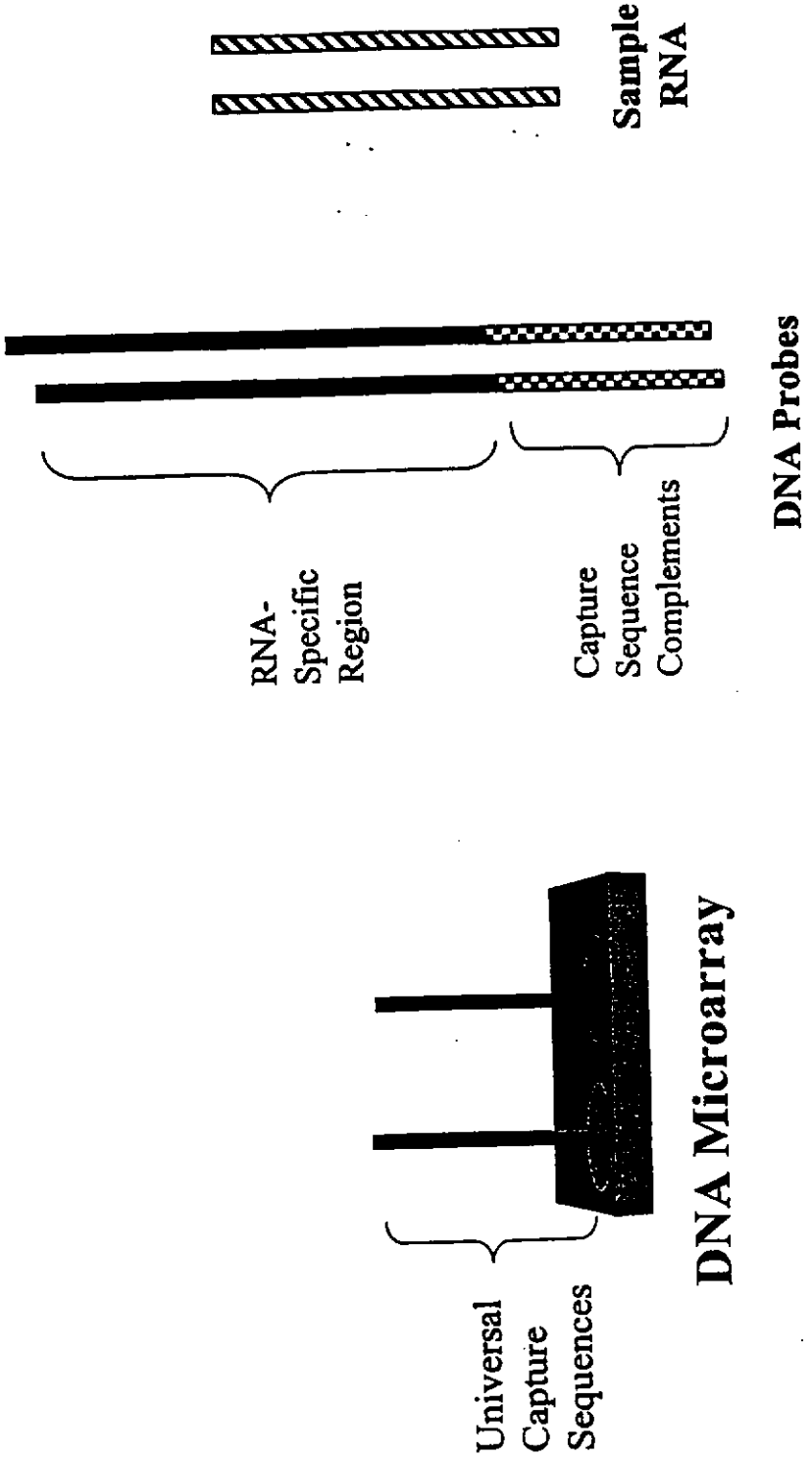

Sample RNA
DNA Probes
RNA-Specific Region
Capture Sequence Complements
Hybridize
DNA Microarray
Universal Capture Sequences

Figure 2A

Figure 2B

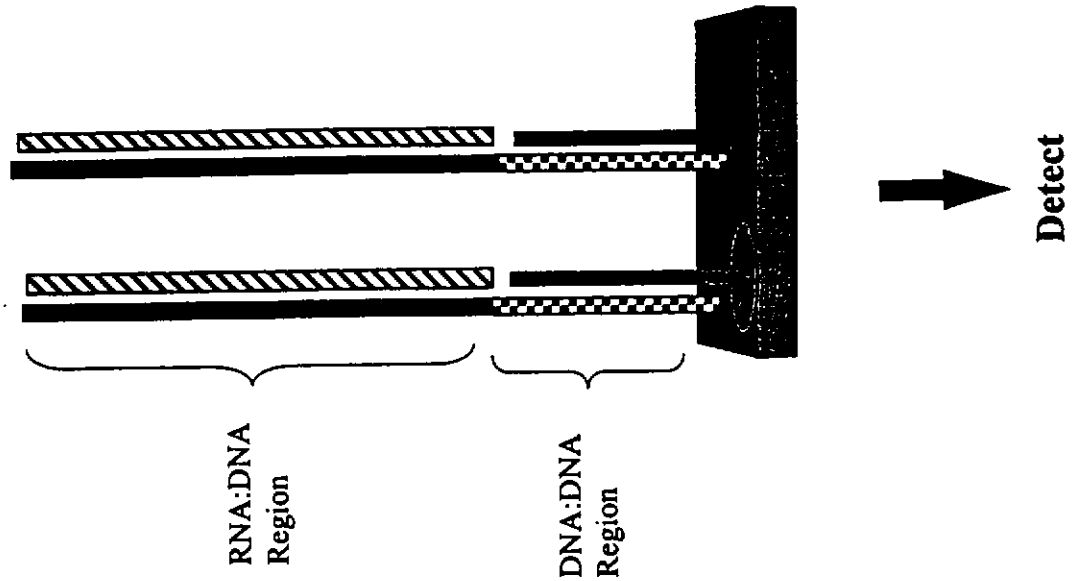
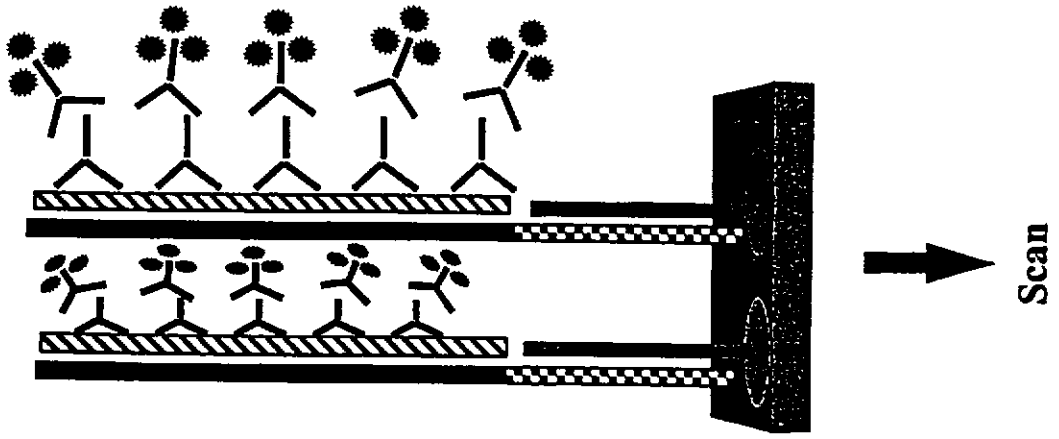


Figure 2C



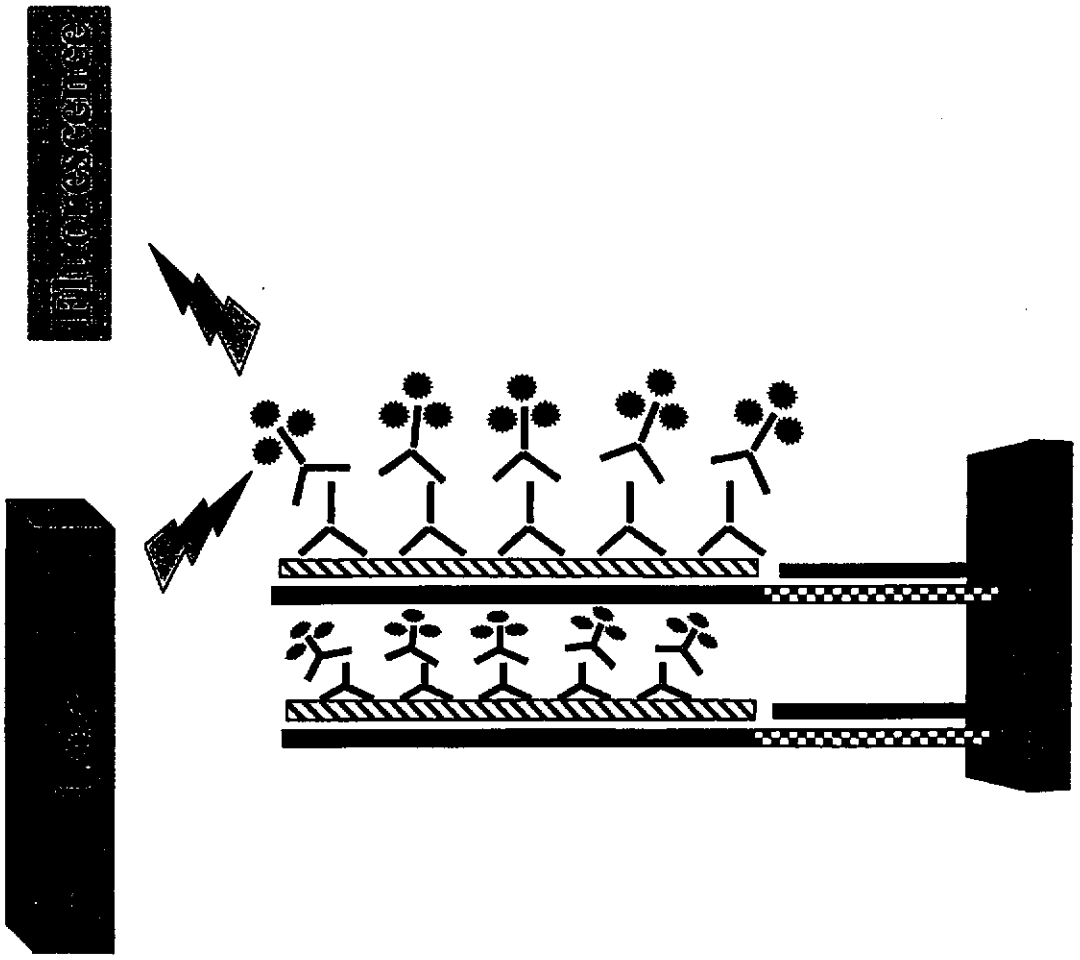


Figure 2D

Figure 3A

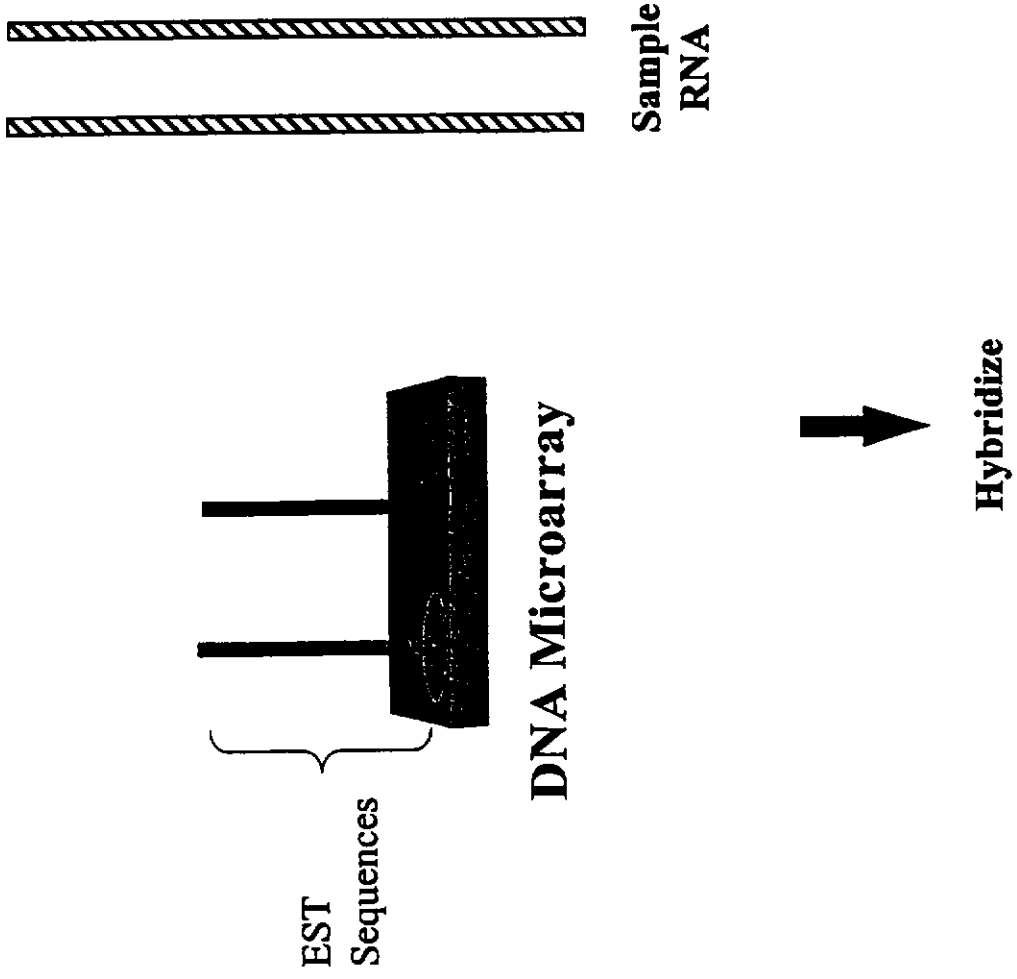


Figure 3B

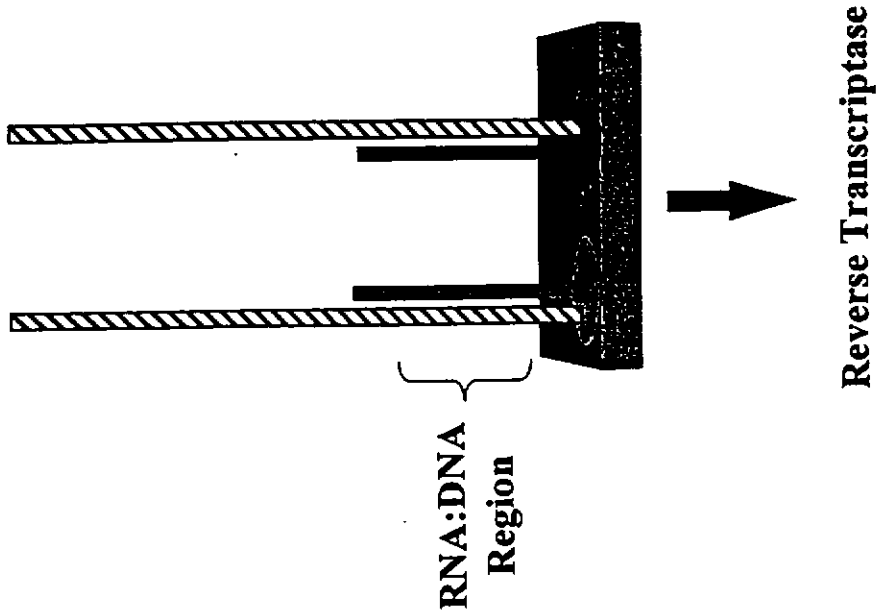


Figure 3C

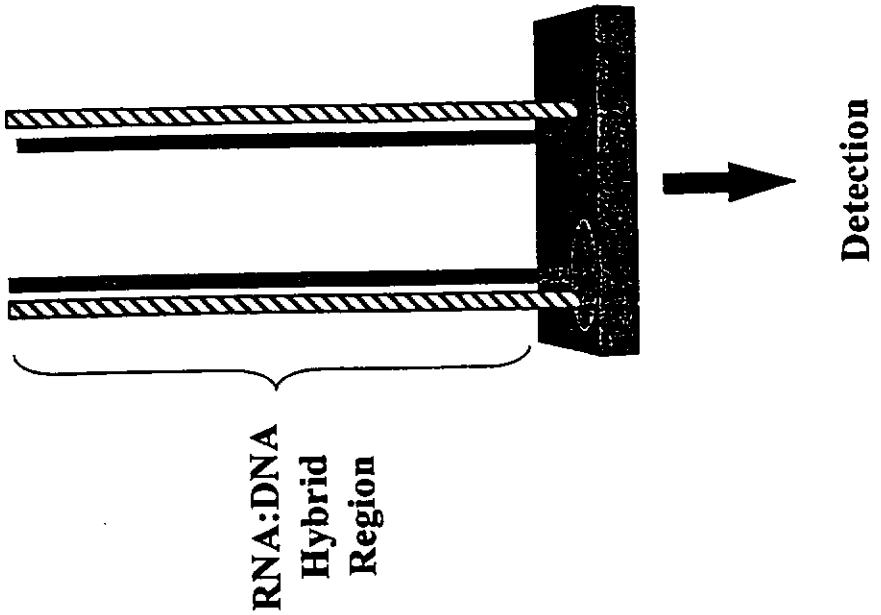


Figure 3D

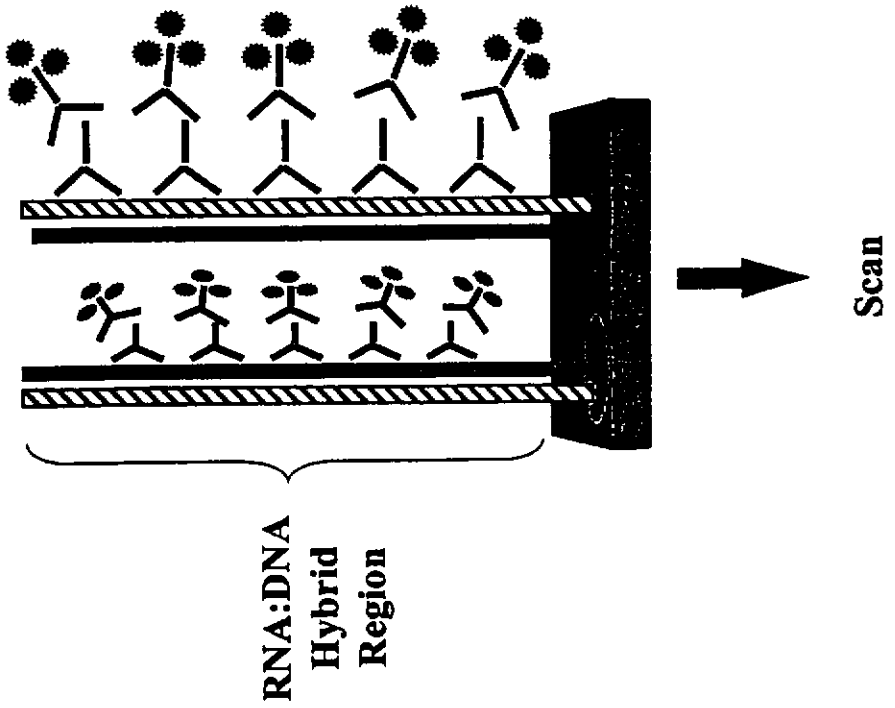
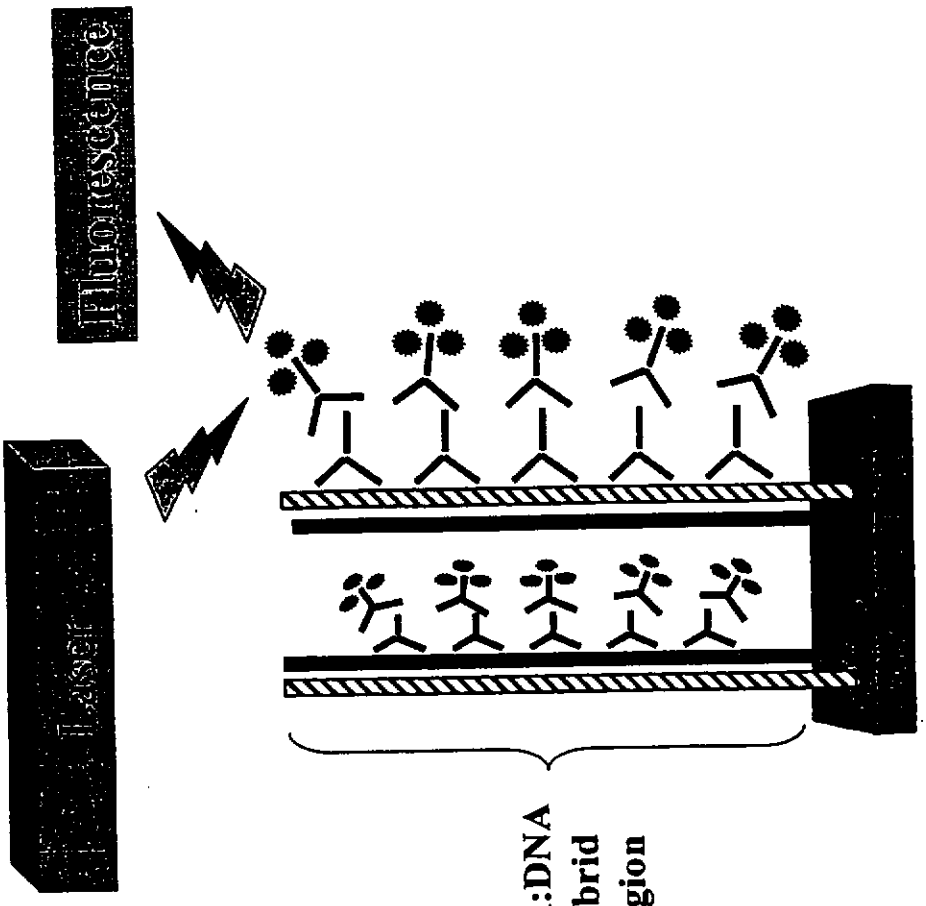


Figure 3E



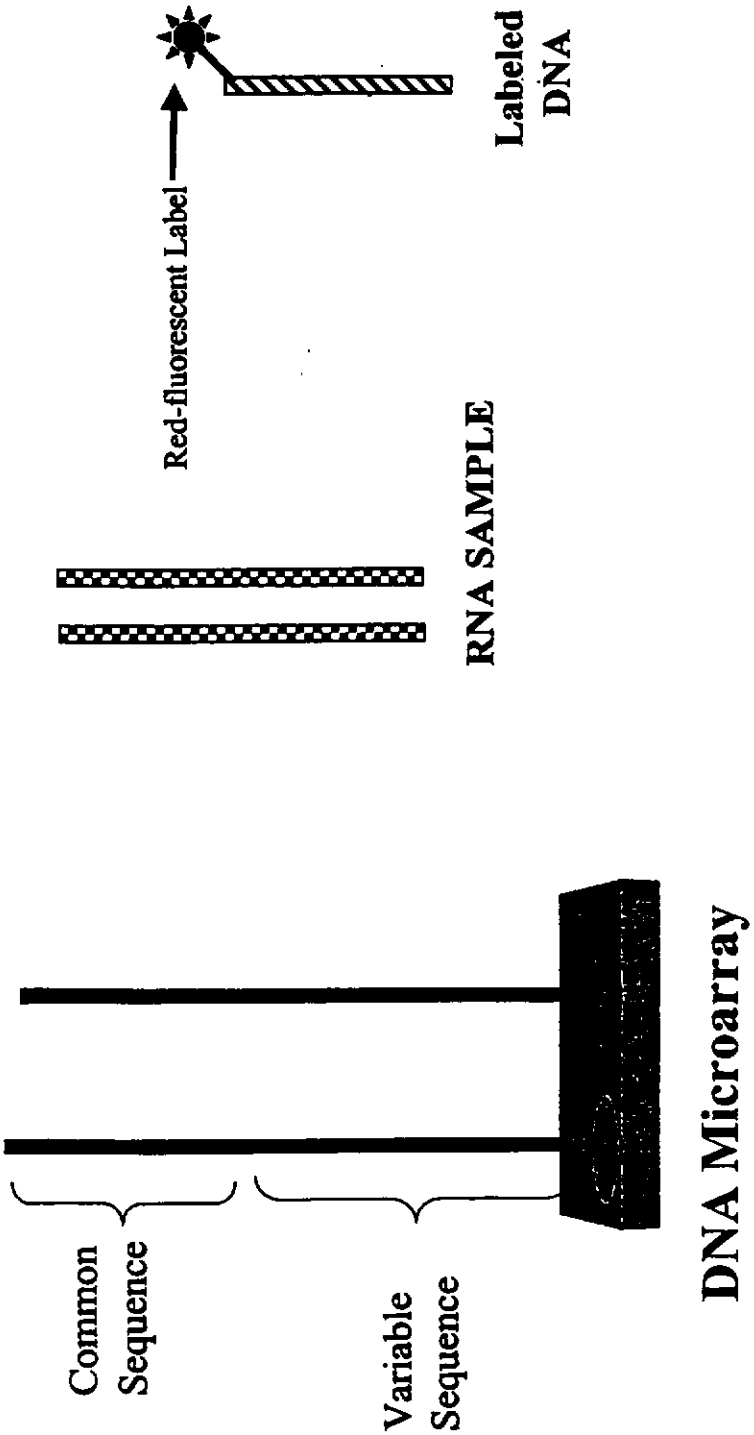

Red-fluorescent Label
Labeled DNA
RNA SAMPLE
Hybridize
(hybridization may be simultaneous or sequential depending on the DNA sequence length)
DNA Microarray
Common Sequence
Variable Sequence

Figure 4A

Figure 4B

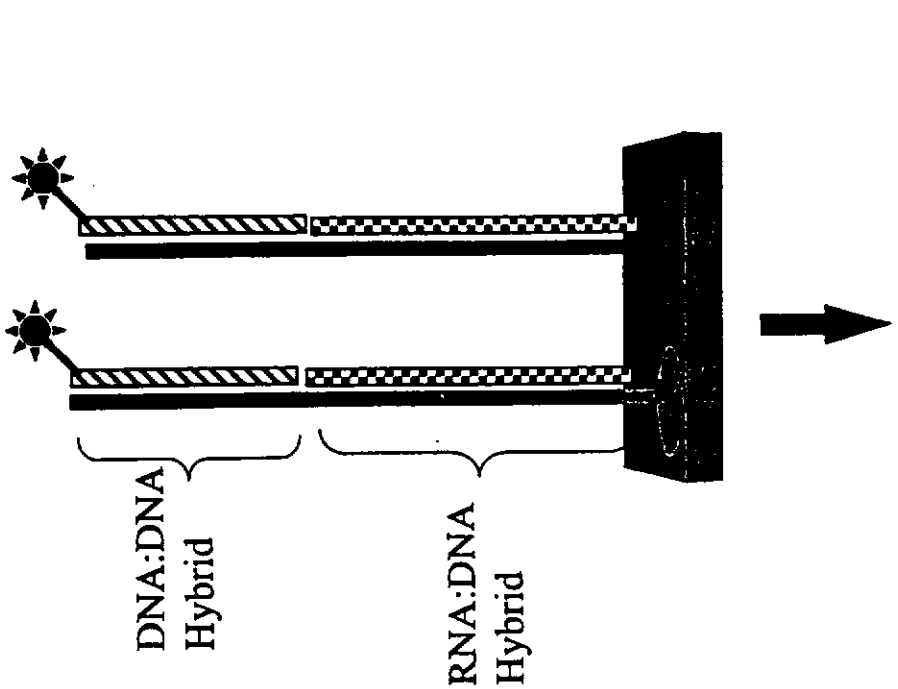
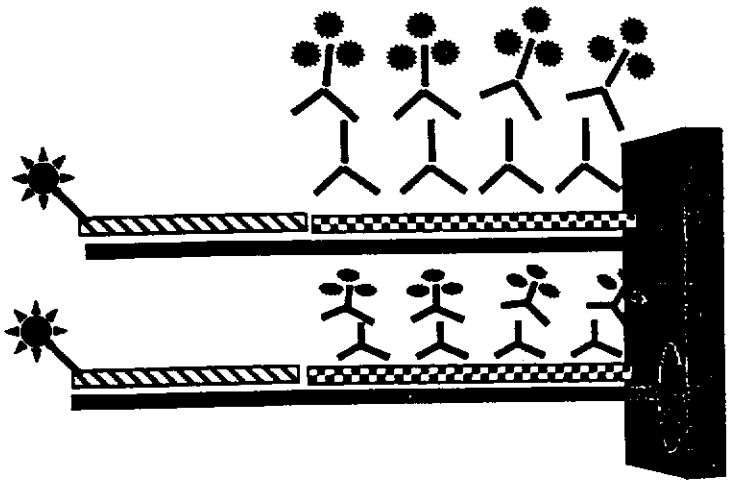
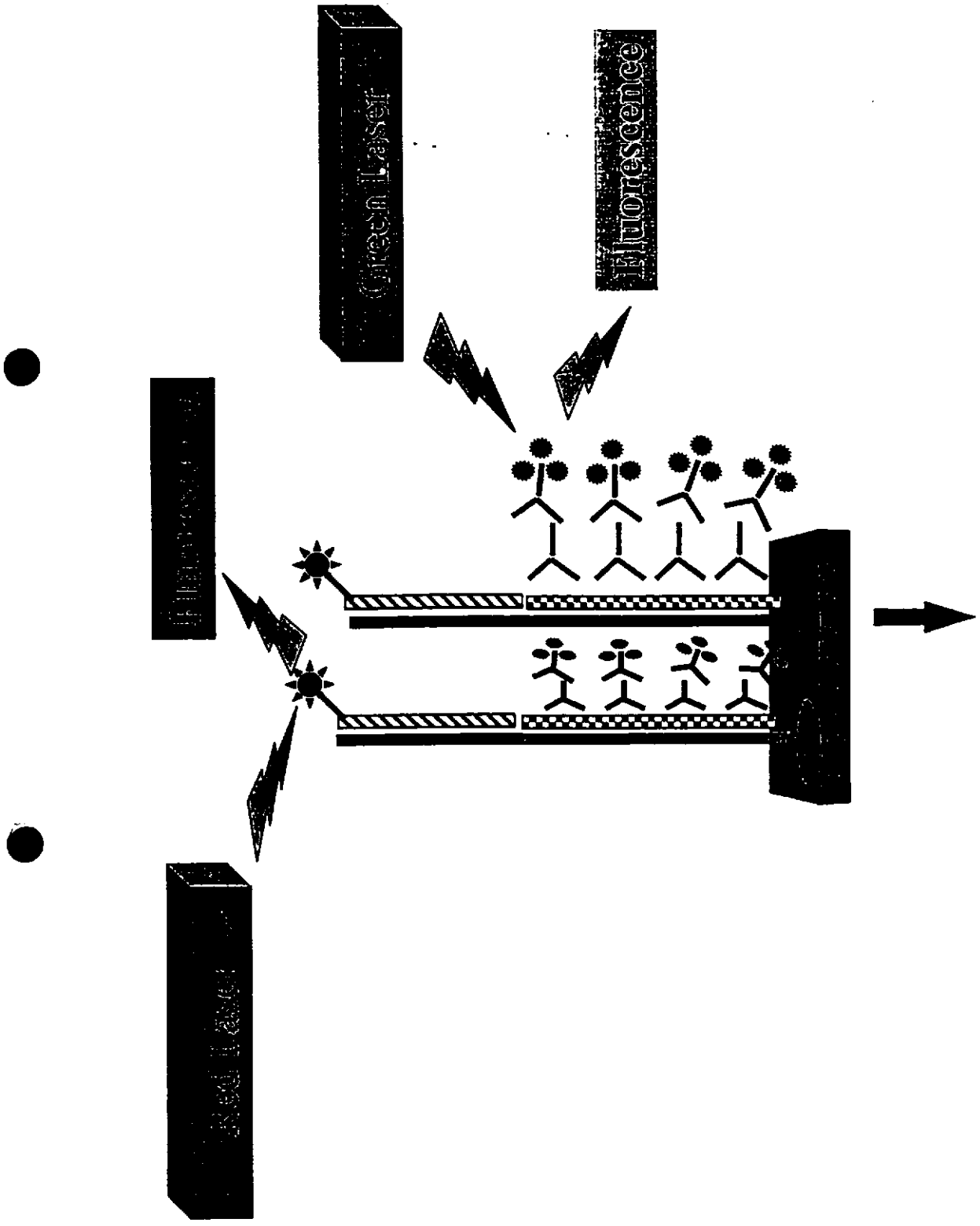

DNA:DNA
Hybrid
RNA:DNA
Hybrid
Detect with anti-RNA:DNA Antibody

Figure 4C



Scan with red and green lasers



Normalize Signal from RNA (green) with Signal from DNA (red)

Figure 4D

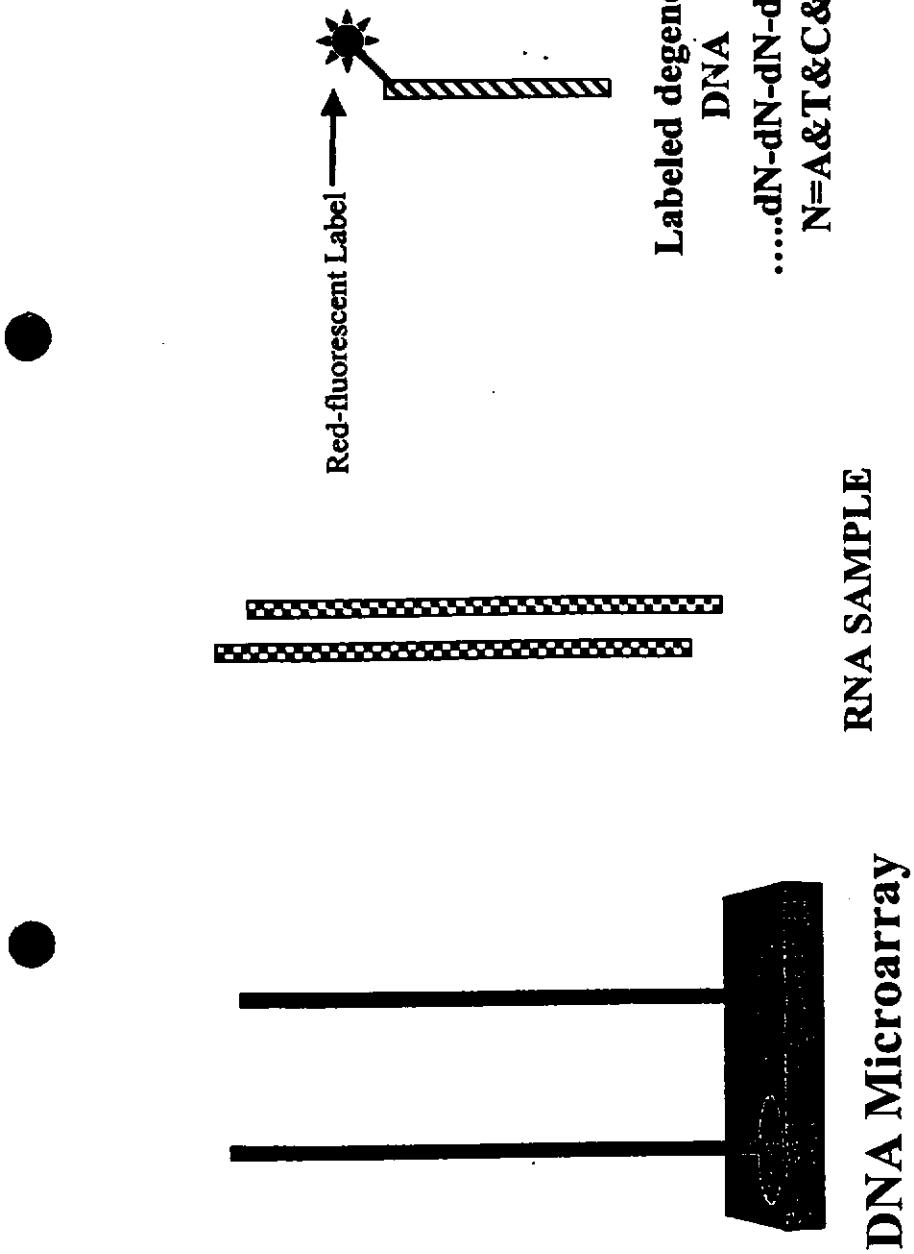
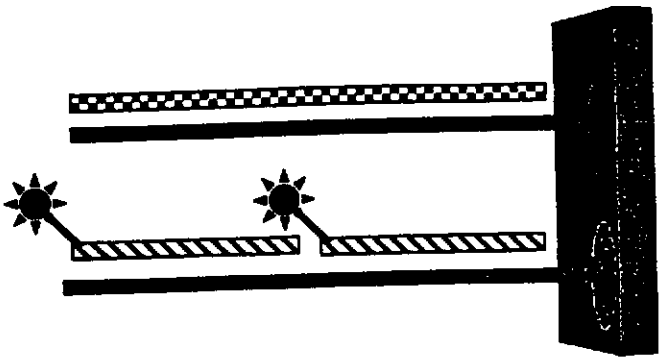

Red-fluorescent Label
Labeled degenerate DNA
.....dN-dN-dN-dN....
N=A&T&C&G
RNA SAMPLE
DNA Microarray
Hybridize
(hybridization may be simultaneous or sequential depending on the DNA sequence length)

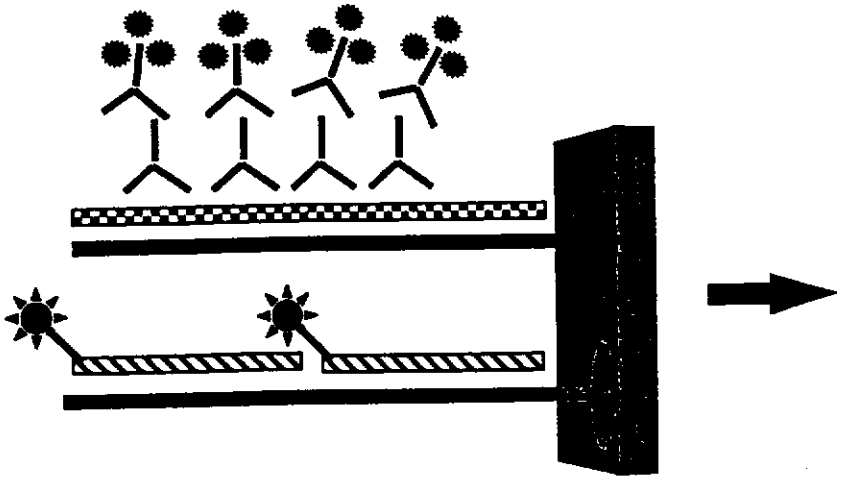
Figure 5A

Figure 5B



Detect with anti-RNA:DNA Antibody

Figure 5C



Scan with Red and Green Lasers

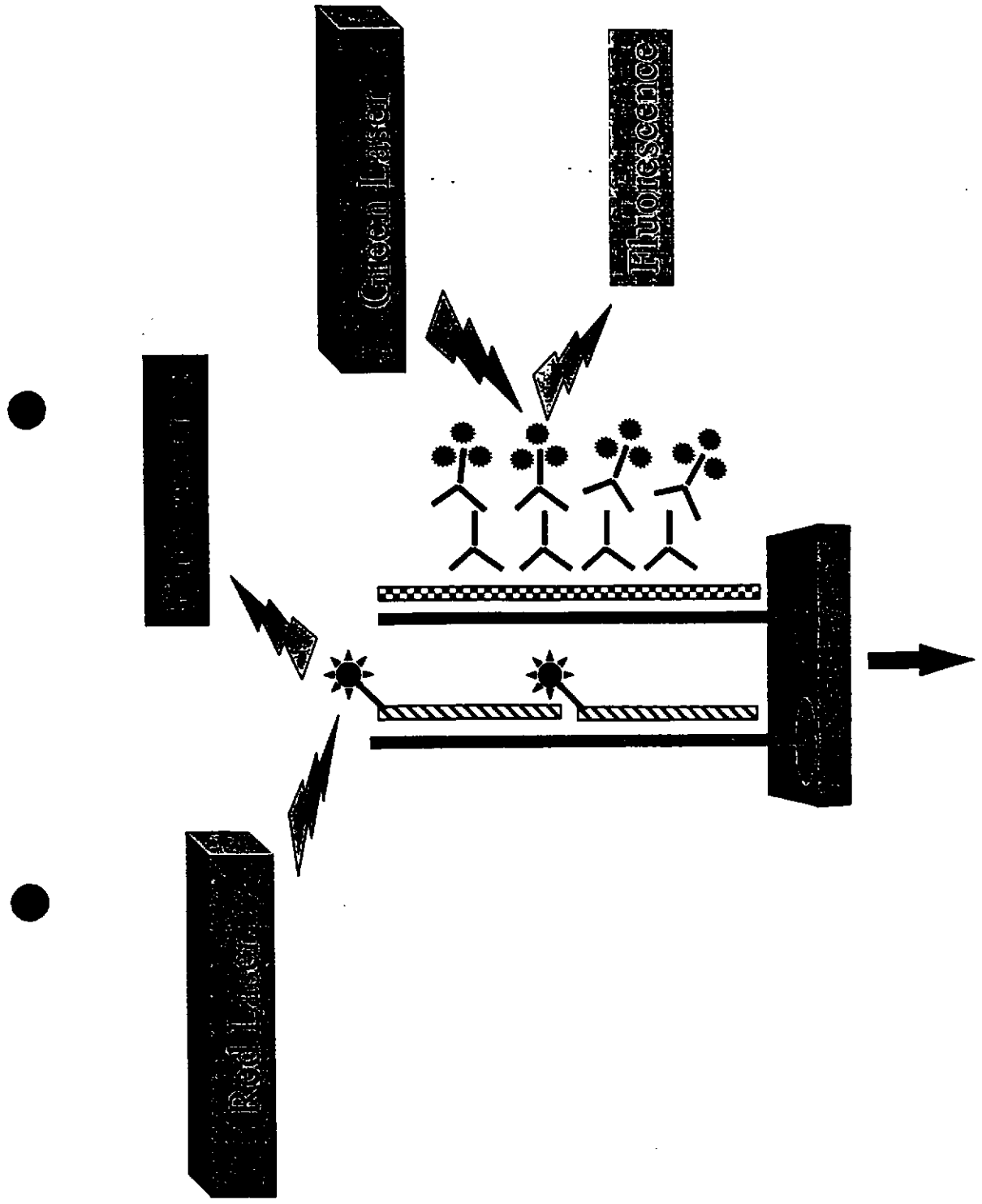

Green Laser
Fluorescence
Red Laser
Normalize Signal from RNA (green) with Signal from DNA (red)

Figure 5D

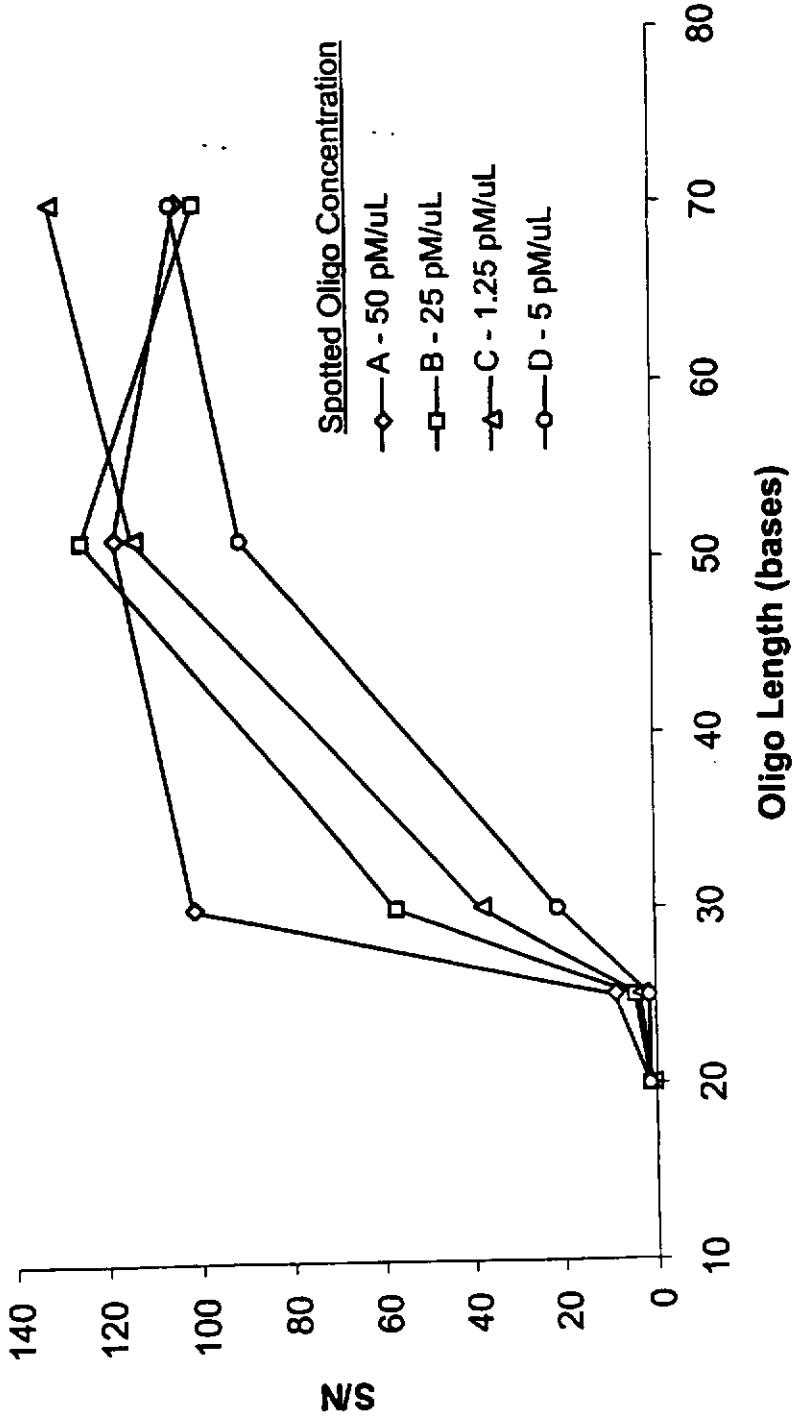

Spotted Oligo Concentration
A - 50 pM/uL
B - 25 pM/uL
C - 1.25 pM/uL
D - 5 pM/uL
S/N
0
20
40
60
80
100
120
140
Oligo Length (bases)
10
20
30
40
50
60
70
80

Figure 6A

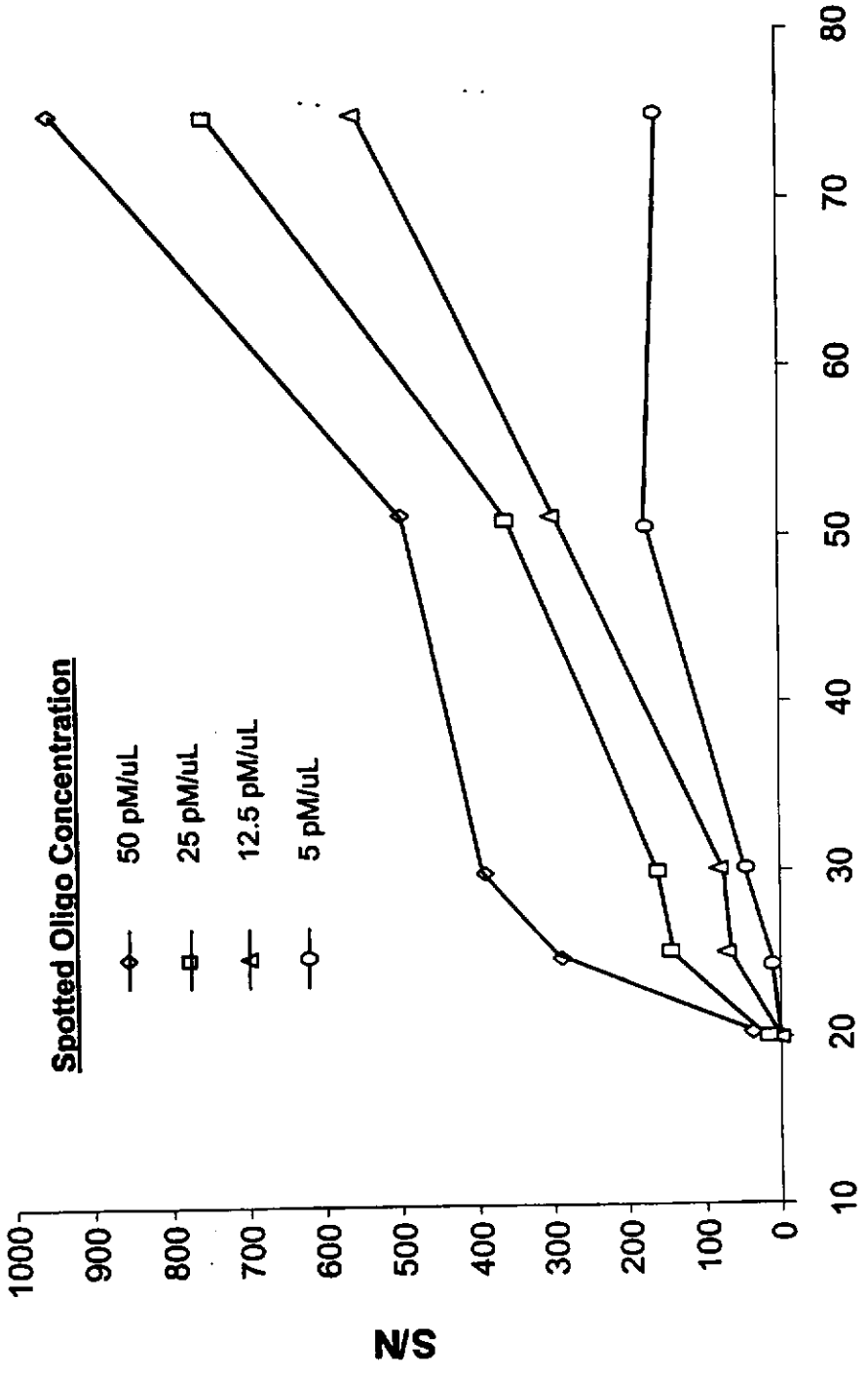

Spotted Oligo Concentration
50 pM/uL
25 pM/uL
12.5 pM/uL
5 pM/uL
N/S
1000
900
800
700
600
500
400
300
200
100
0
10
20
30
40
50
60
70
80
Oligo Length (bases)

Figure 6B