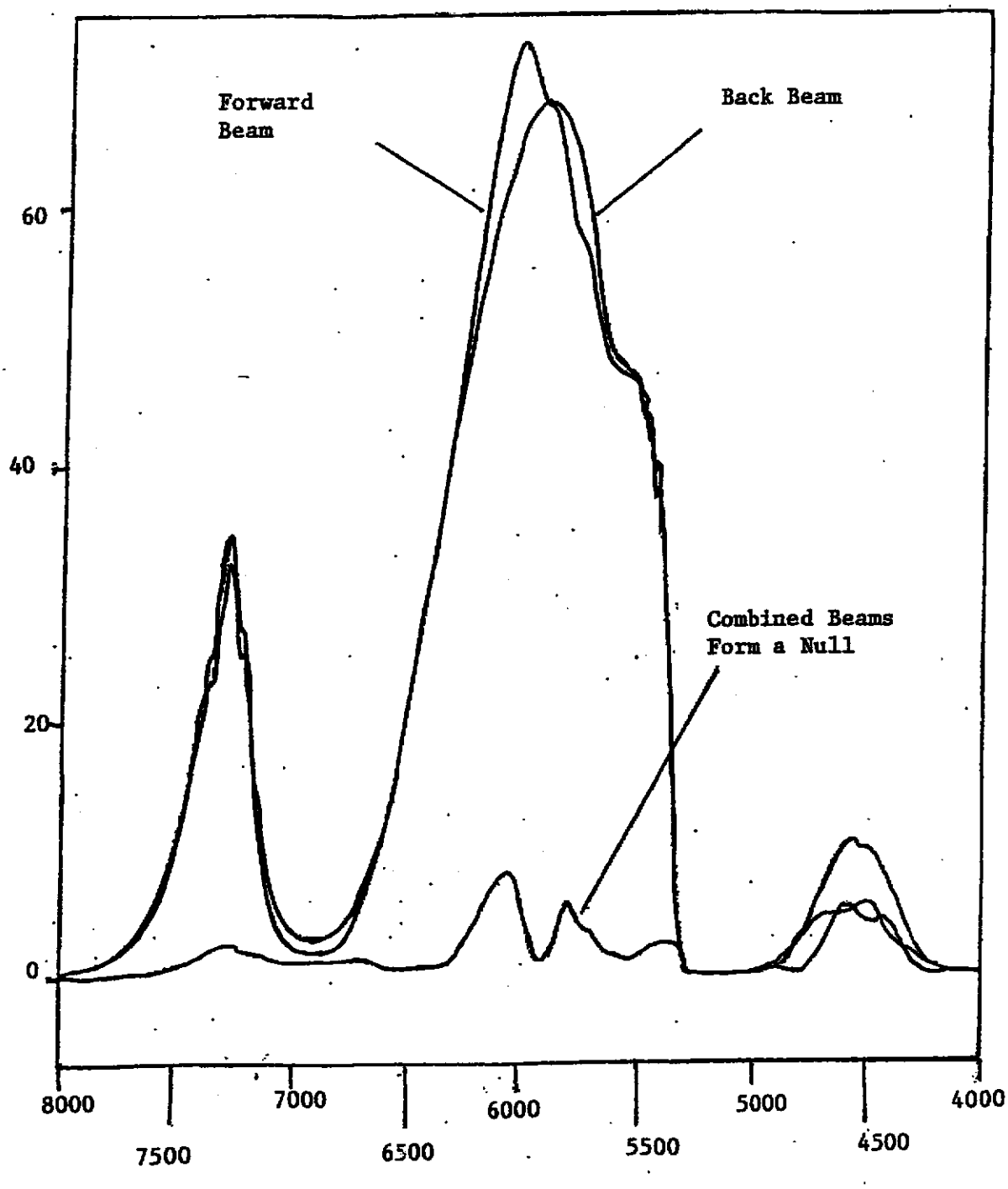

Forward Beam
Back Beam
Combined Beams Form a Null
60
40
20
0
8000
7500
7000
6500
6000
5500
5000
4500
4000

FIG. 1

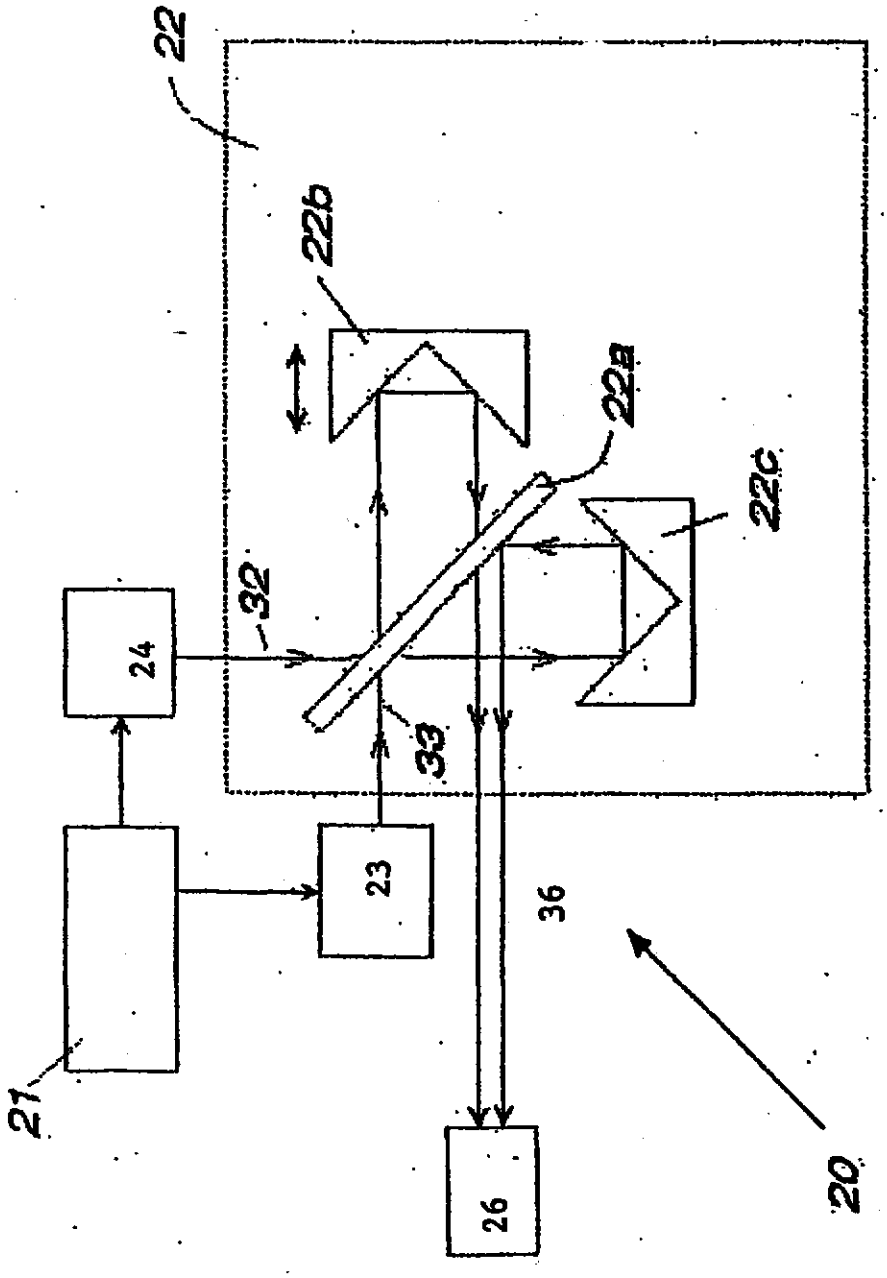


FIG. 2

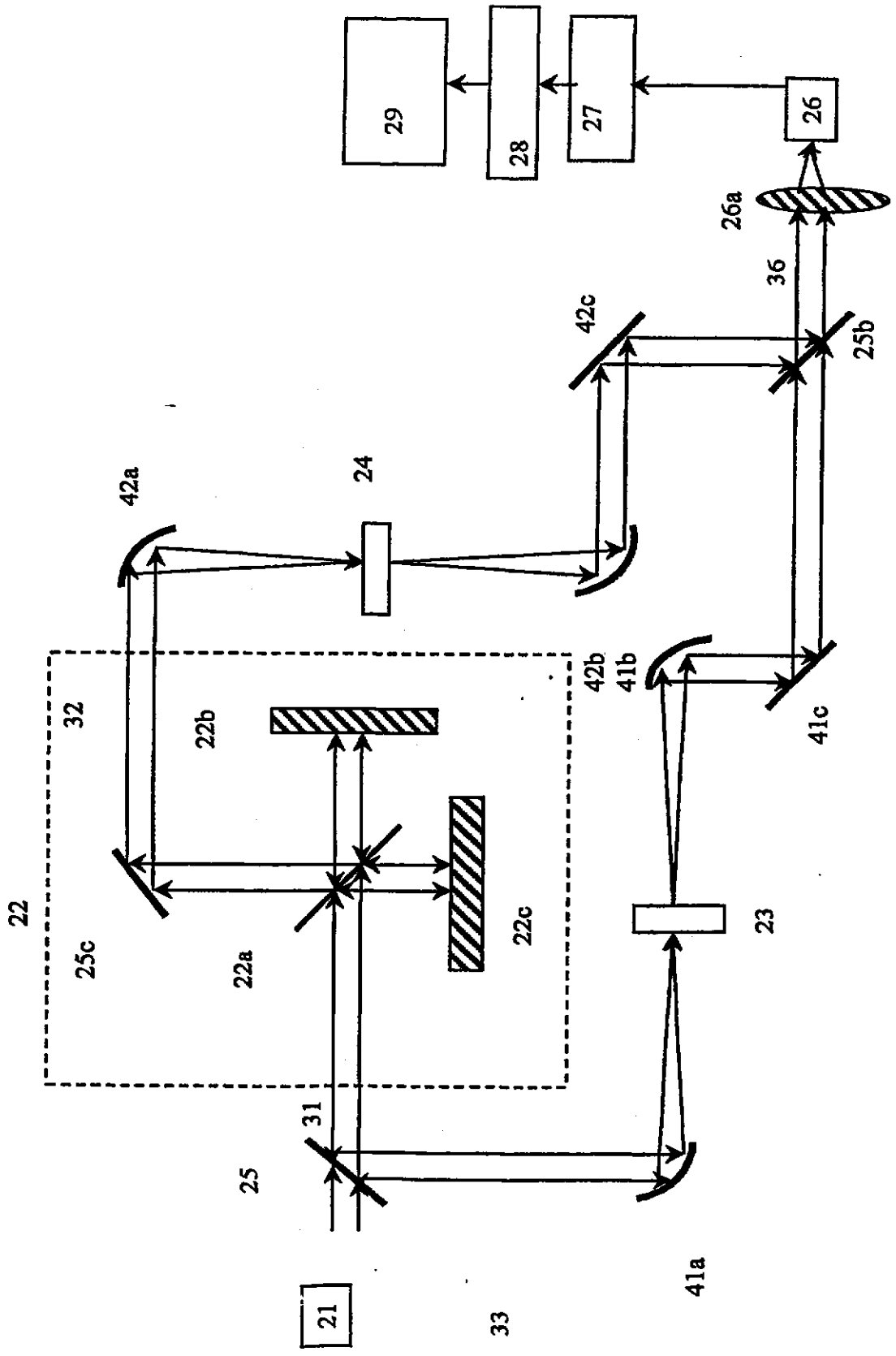

29
28
27
26
26a
36
42c
25b
24
42a
42b
41b
41c
32
22b
22
25c
22a
22c
23
31
25
21
33
41a

Fig. 3

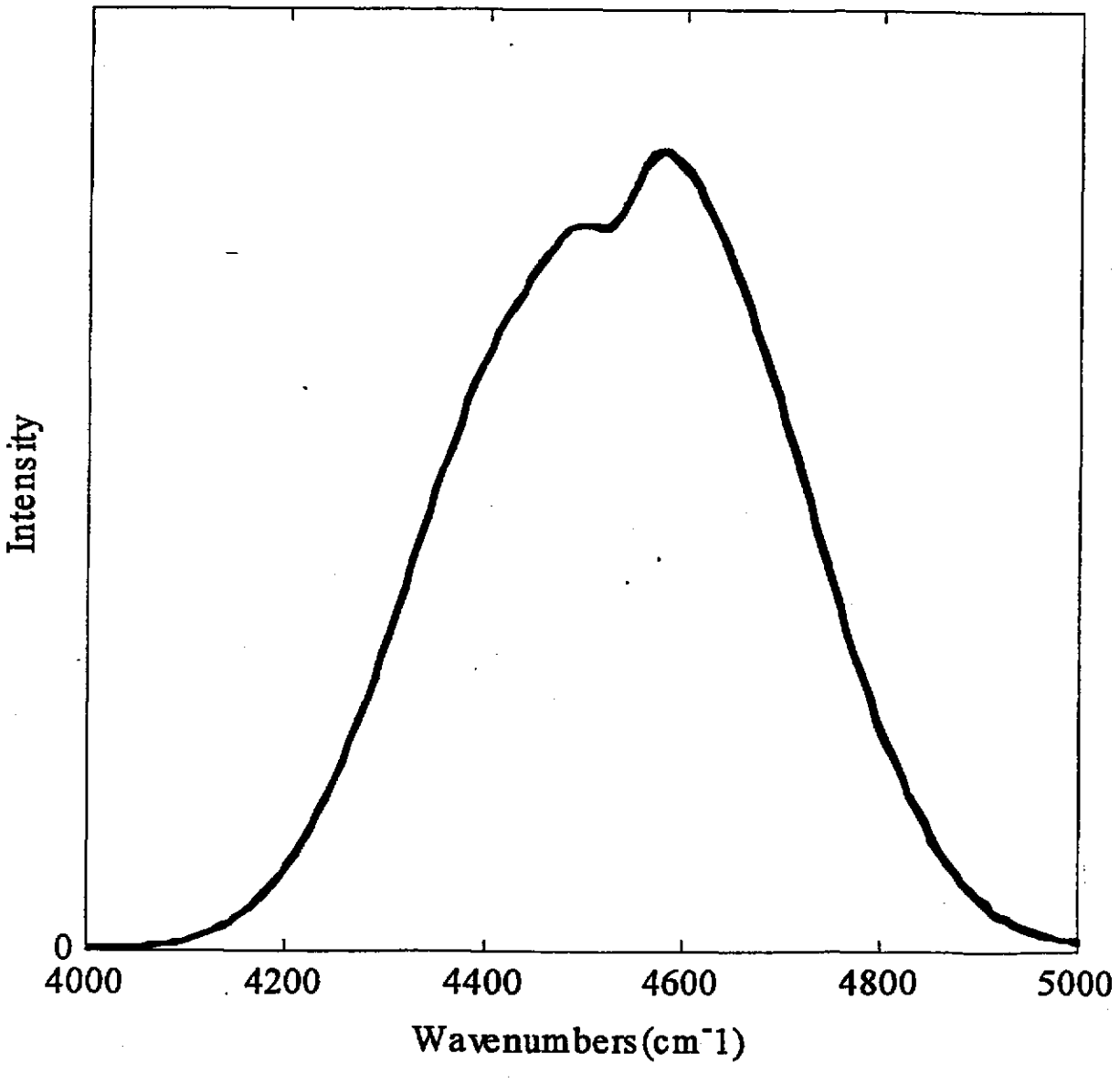


Fig. 4A

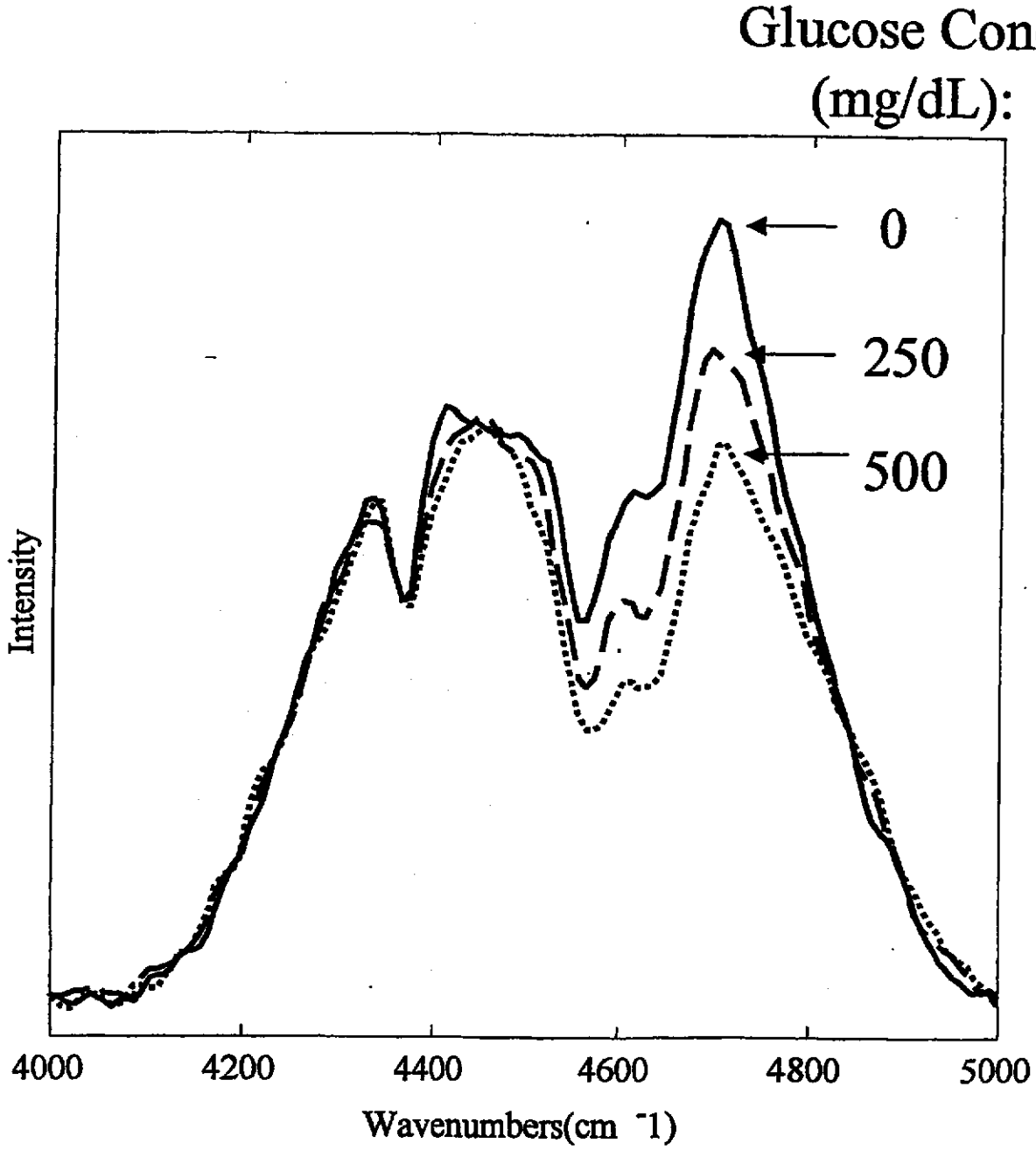

Glucose Conc.
(mg/dL):
0
250
500
Intensity
4000
4200
4400
4600
4800
5000
Wavenumbers(cm ⁻1)

Fig. 4B

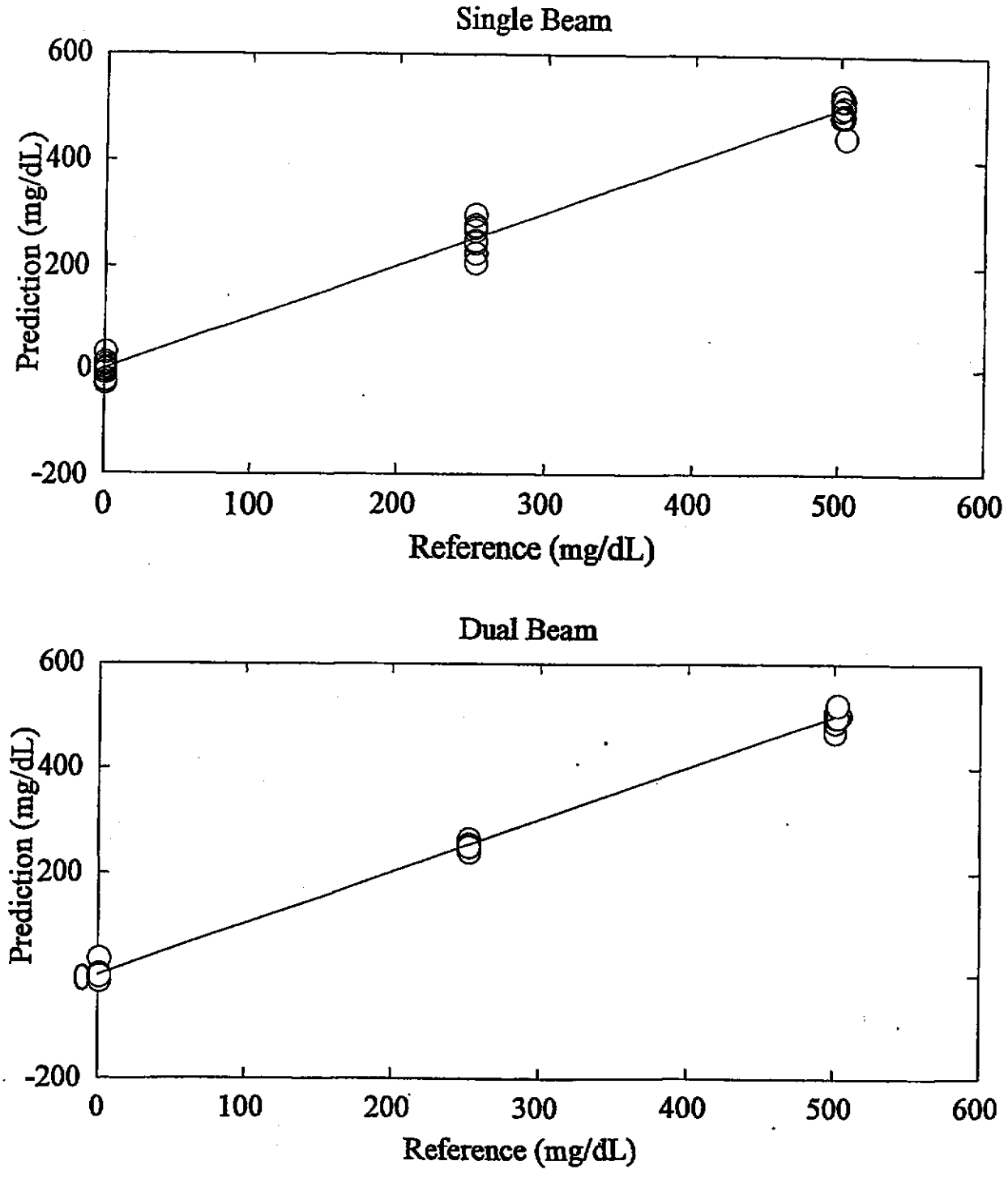

Single Beam
Prediction (mg/dL)
600
400
200
0
-200
0
100
200
300
400
500
600
Reference (mg/dL)
Dual Beam
Prediction (mg/dL)
600
400
200
-200
0
100
200
300
400
500
600
Reference (mg/dL)

Fig. 5

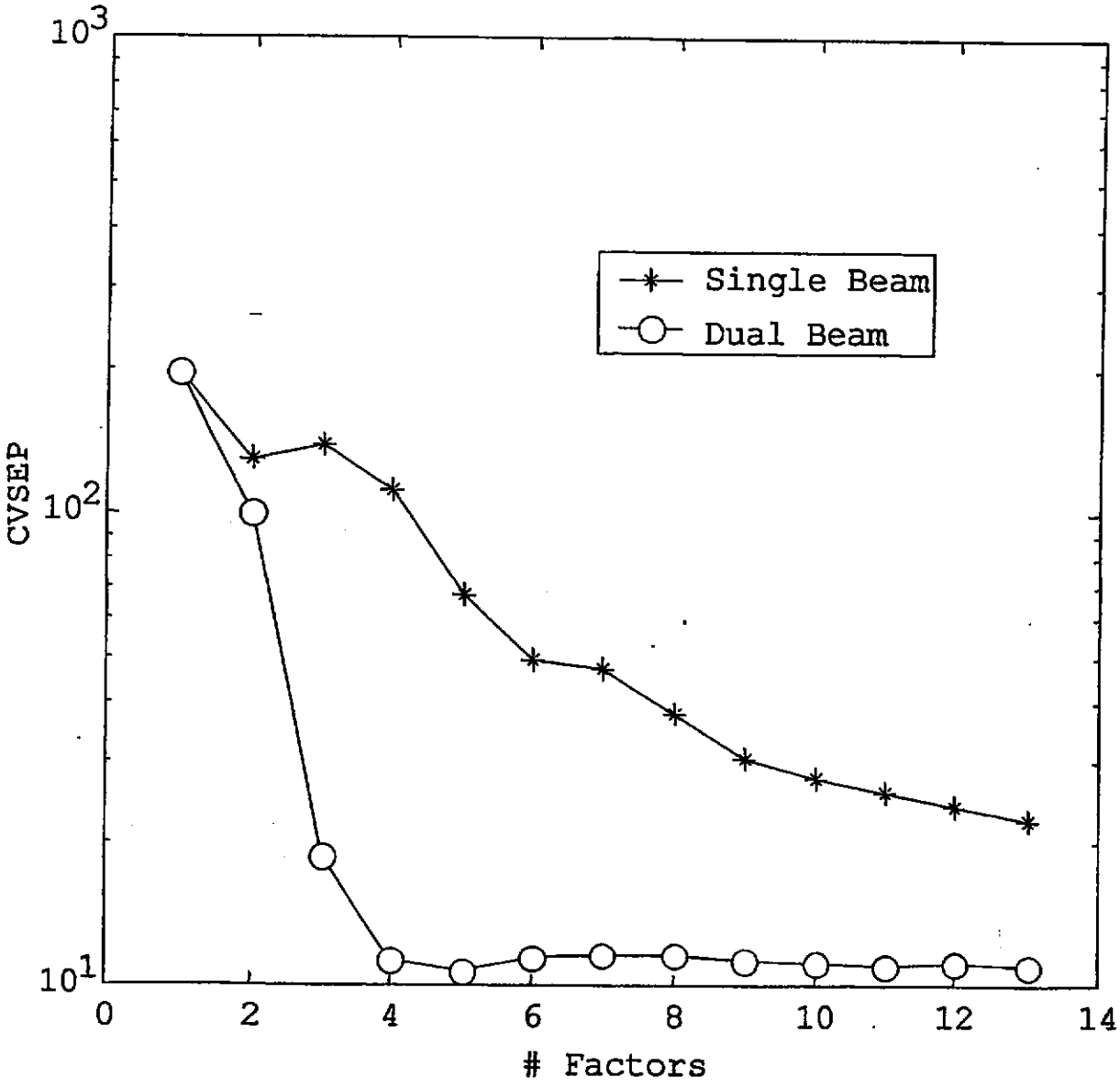

10^3
10^2
10^1
CVSEP
Single Beam
Dual Beam
0
2
4
6
8
10
12
14
Factors

Fig. 6

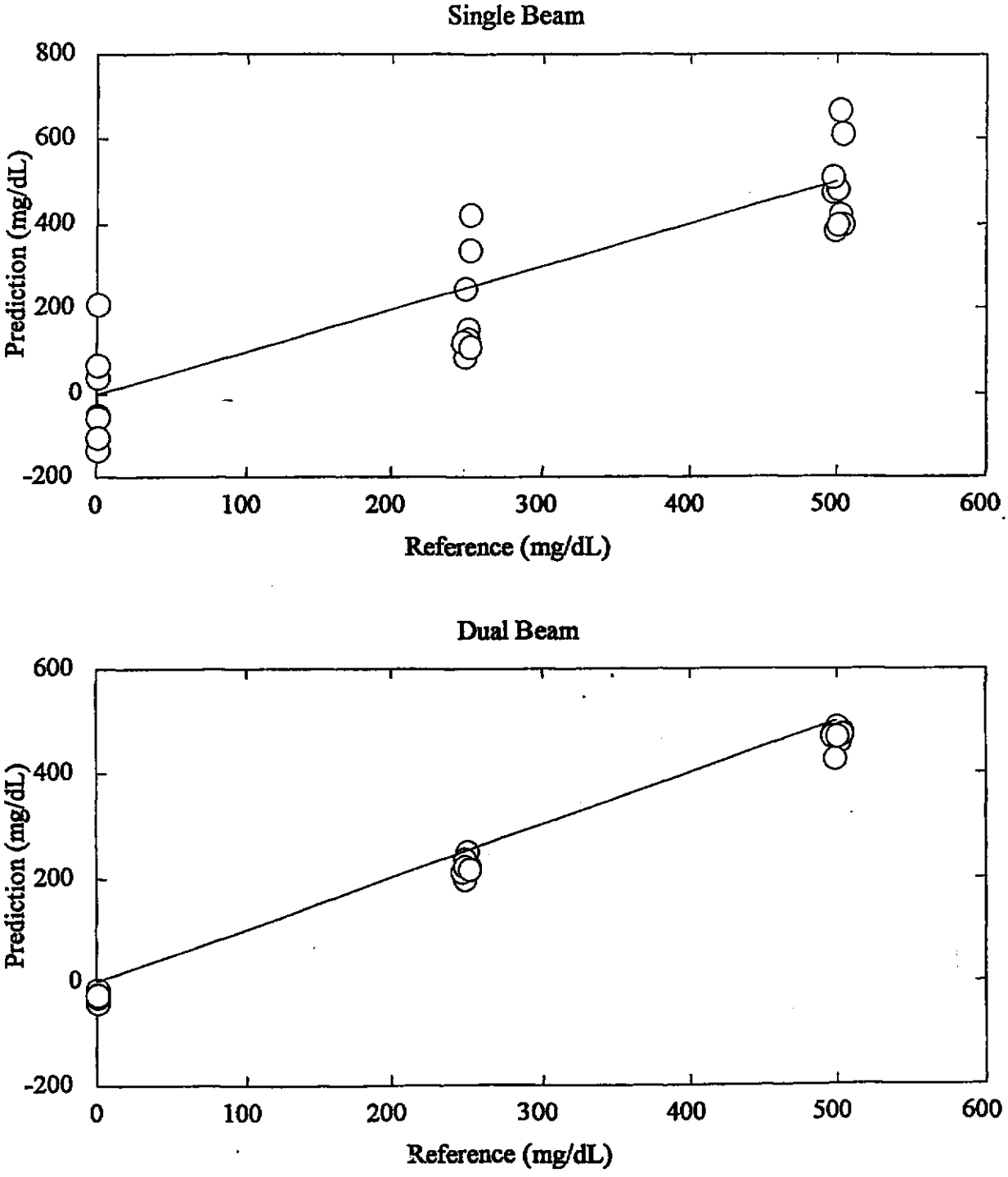

Single Beam
Prediction (mg/dL)
800
600
400
200
0
-200
0
100
200
300
400
500
600
Reference (mg/dL)
Dual Beam
Prediction (mg/dL)
600
400
200
0
-200
0
100
200
300
400
500
600
Reference (mg/dL)

Fig. 7A

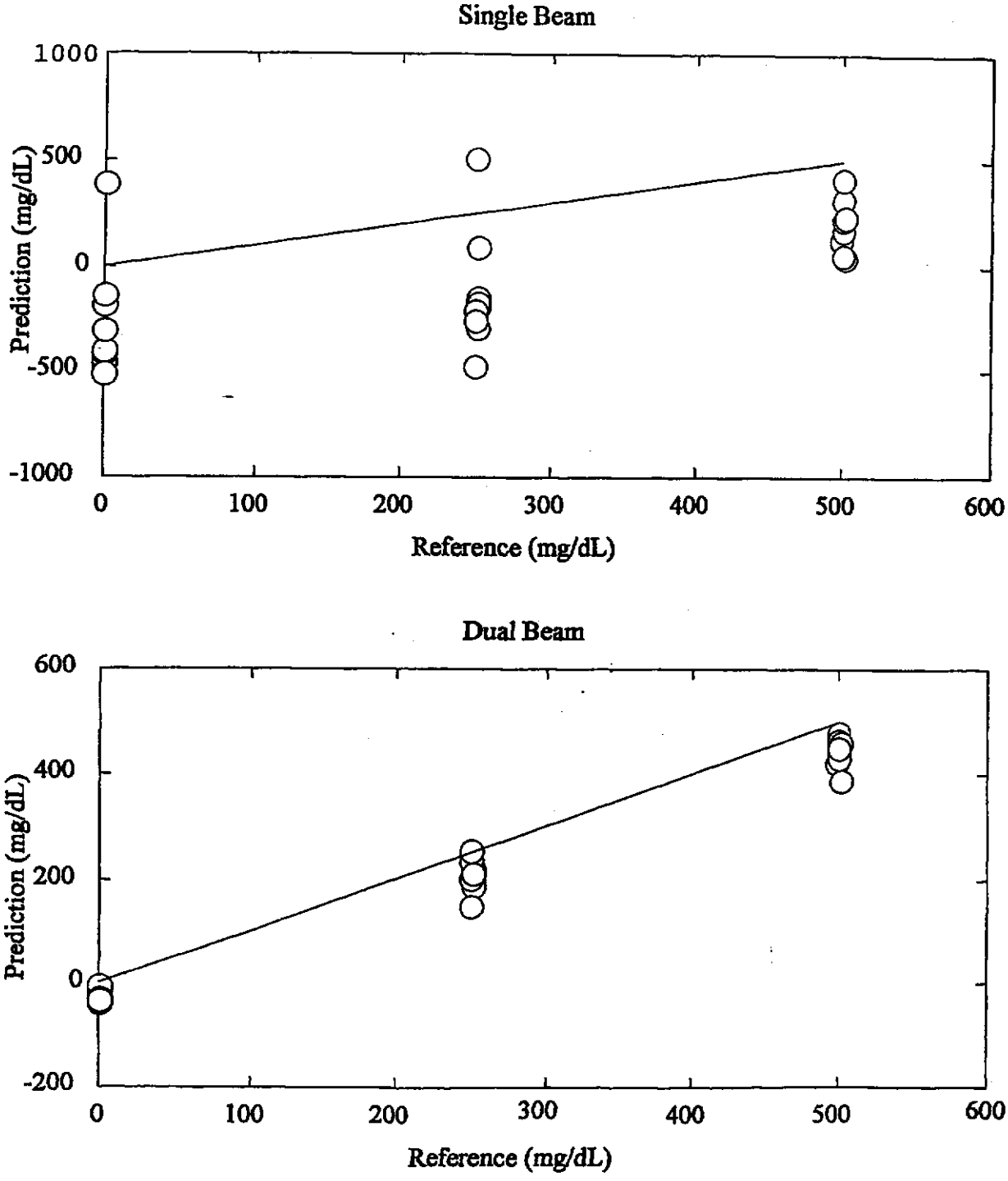

Single Beam
1000
500
0
-500
-1000
Prediction (mg/dL)
0
100
200
300
400
500
600
Reference (mg/dL)
Dual Beam
600
400
200
0
-200
Prediction (mg/dL)
0
100
200
300
400
500
600
Reference (mg/dL)

Fig. 7B