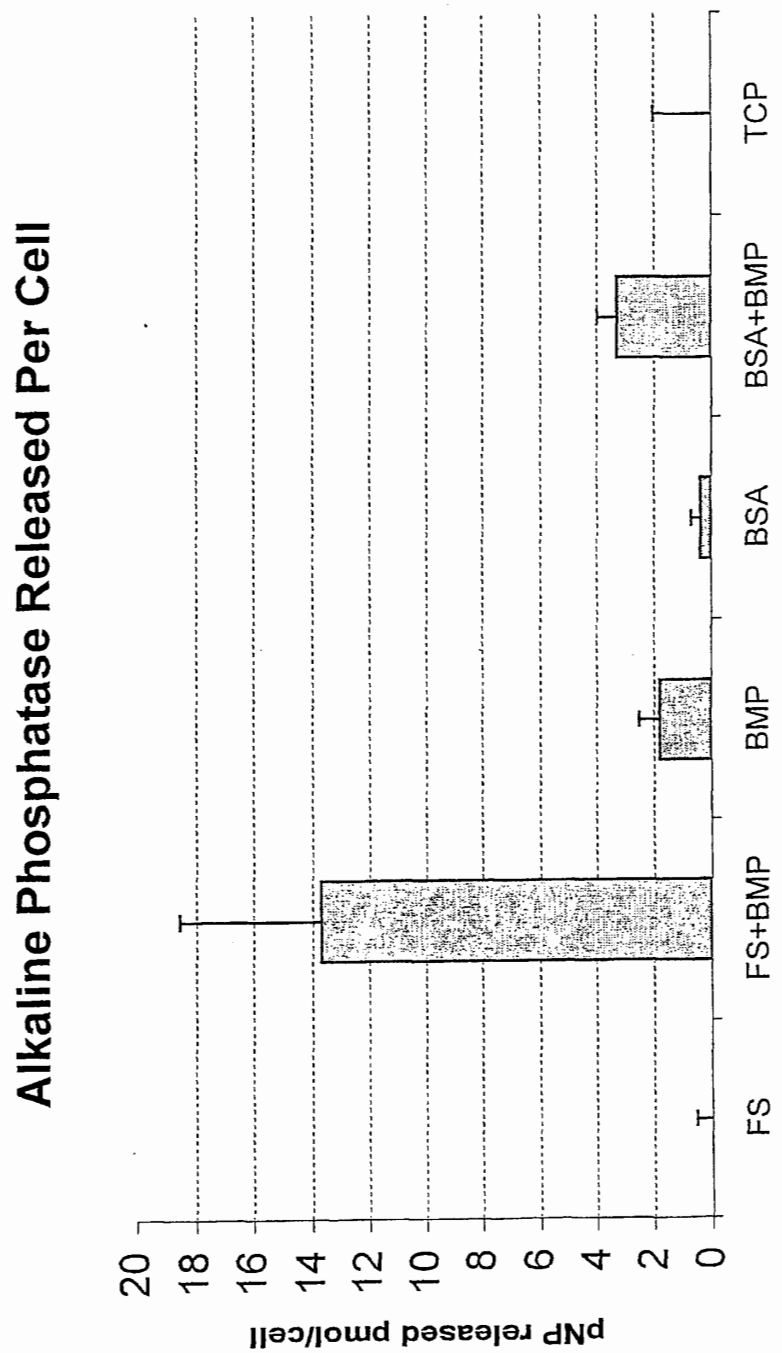
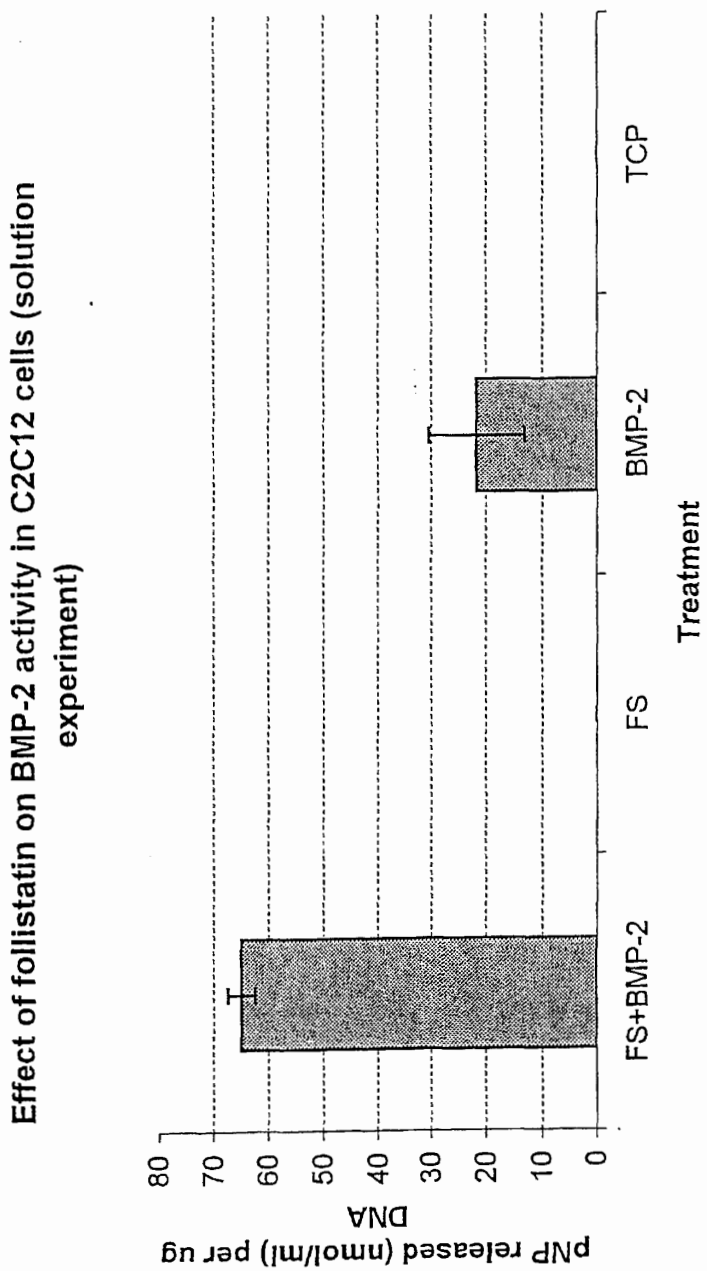

Alkaline Phosphatase Released Per Cell
pNP released pmol/cell
0
2
4
6
8
10
12
14
16
18
20
FS
FS+BMP
BMP
BSA
BSA+BMP
TCP

Figure 1-1

Figure 1.2a


Effect of follistatin on BMP-2 activity in C2C12 cells (solution experiment)
pNP released (nmol/ml) per ug DNA
0
10
20
30
40
50
60
70
80
FS+BMP-2
FS
BMP-2
TCP
Treatment

29 NOV 2005

Figure 1.2b

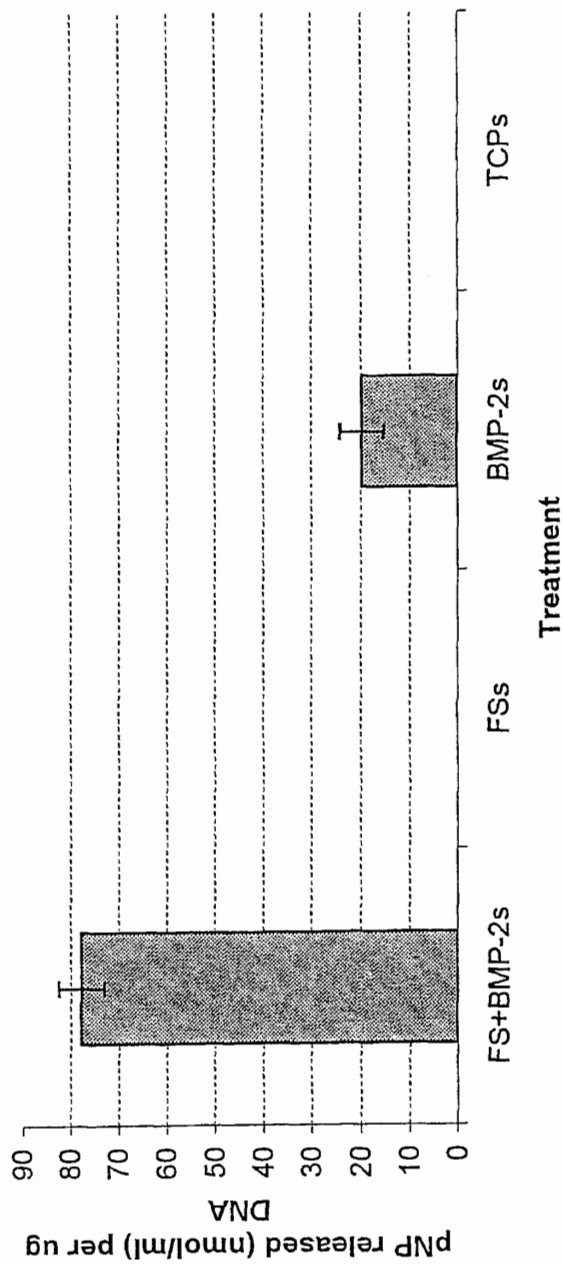
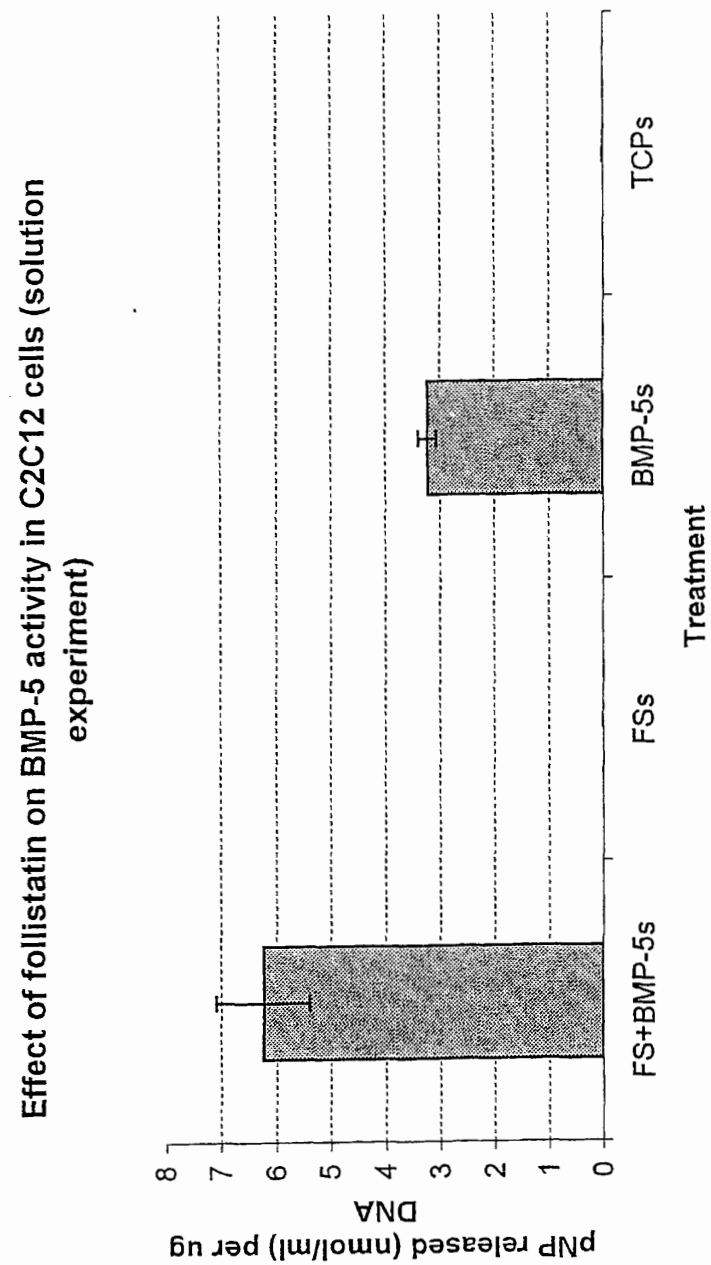


Figure 1.2c


Effect of follistatin on BMP-5 activity in C2C12 cells (solution experiment)
pNP released (nmol/ml) per ug DNA
0
1
2
3
4
5
6
7
8
FS+BMP-5s
FSs
BMP-5s
TCPs
Treatment

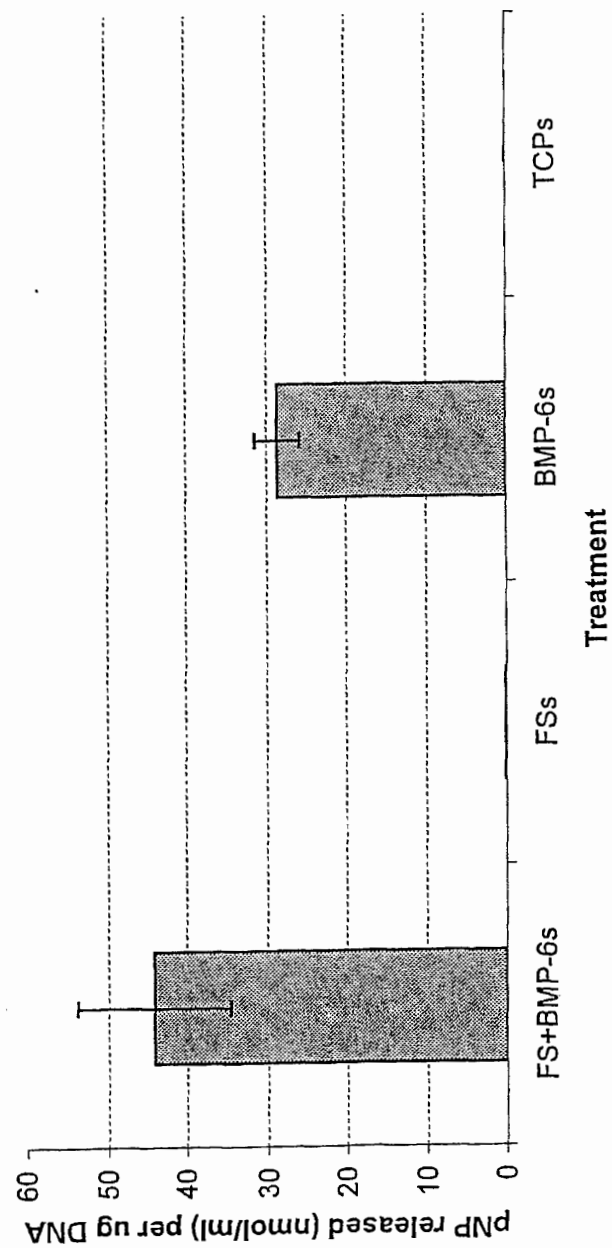

Effect of follistatin on BMP-6 in C2C12 cells (solution)
pNP released (nmol/ml) per ug DNA
0
10
20
30
40
50
60
FS+BMP-6s
FSs
BMP-6s
TCPs
Treatment

Figure 1.2d

Figure 1.2e

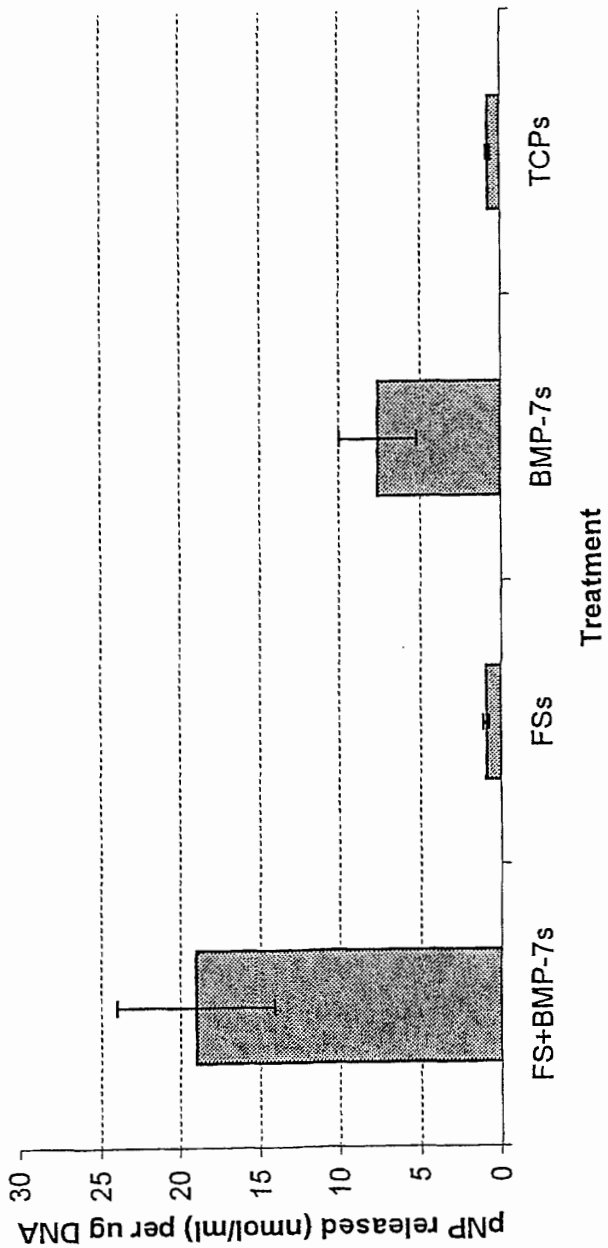

Effect of follistatin on BMP-7 in C2C12 cells (solution)
pNP released (nmol/ml) per ug DNA
0
5
10
15
20
25
30
FS+BMP-7s
FSs
BMP-7s
TCPs
Treatment

Figure 1.3a

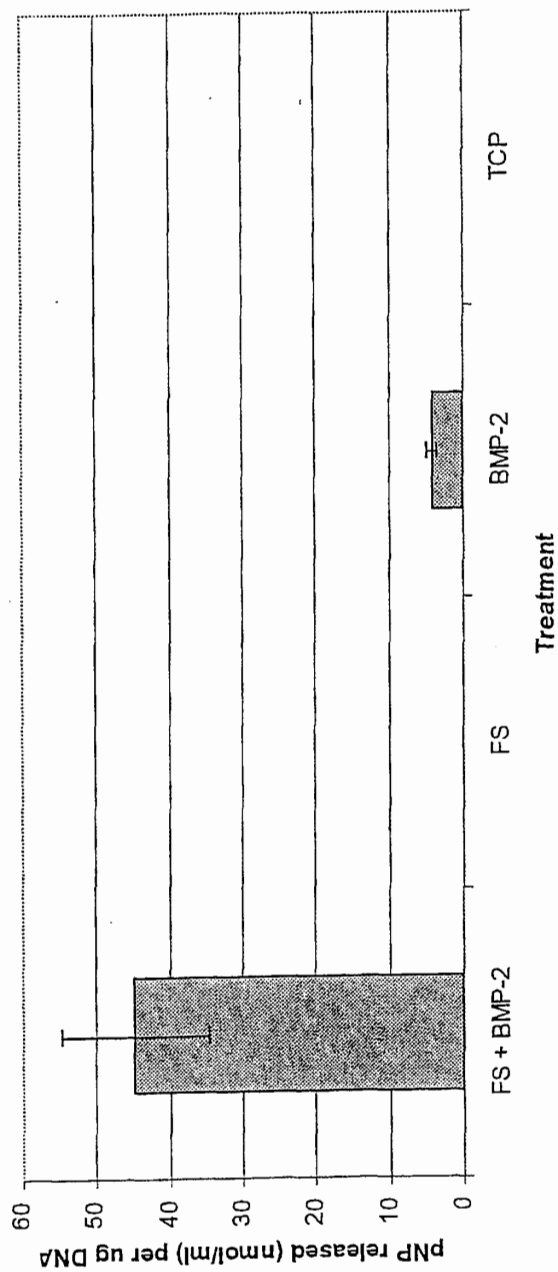

Effect of follistatin on BMP-2 activity in C2C12 cells (bound experiment)
pNP released (nmol/ml) per ug DNA
0
10
20
30
40
50
60
FS + BMP-2
FS
BMP-2
TCP
Treatment

Figure 1.3b

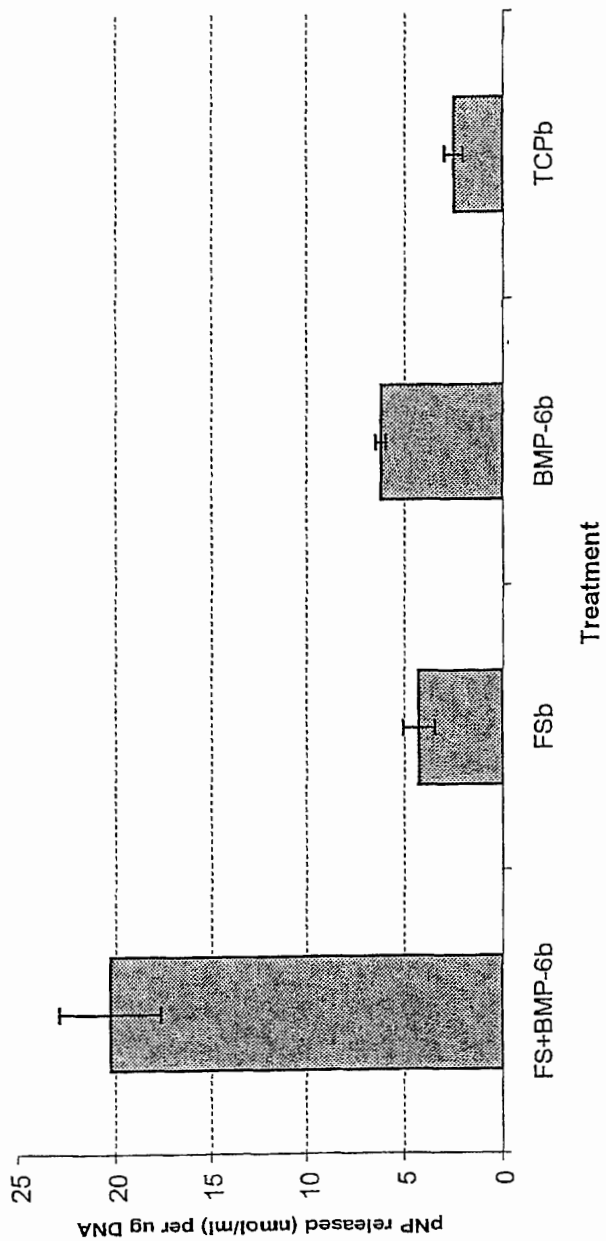

Effect of follistatin on BMP-6 activity in C2C12 cells (bound)
pNP released (nmol/ml) per ug DNA
25
20
15
10
5
0
FS+BMP-6b
FSb
BMP-6b
TCPb
Treatment

Figure 1.3c

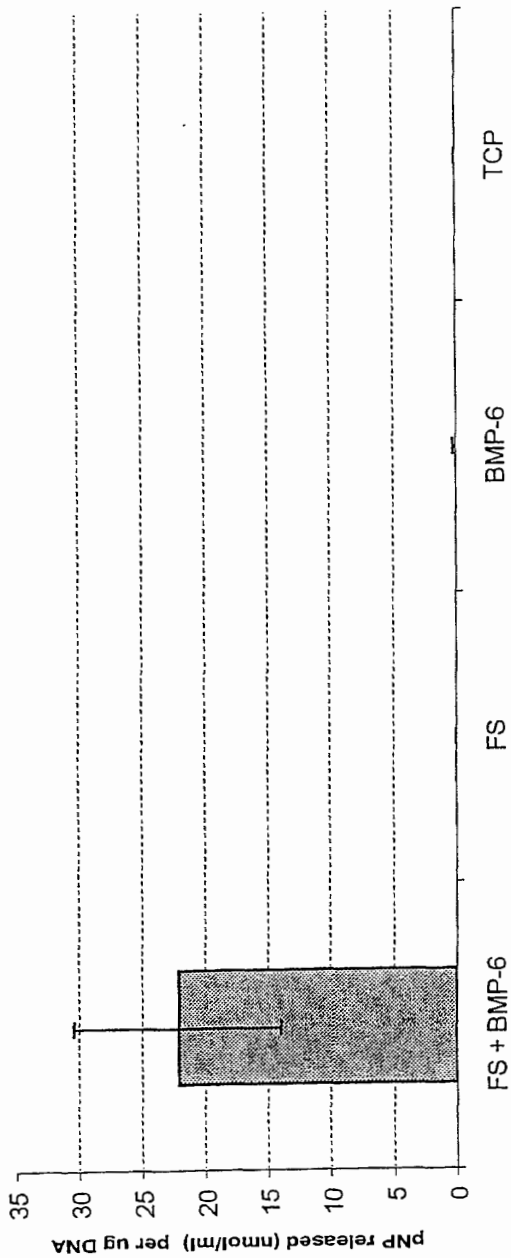


Figure 1.3c

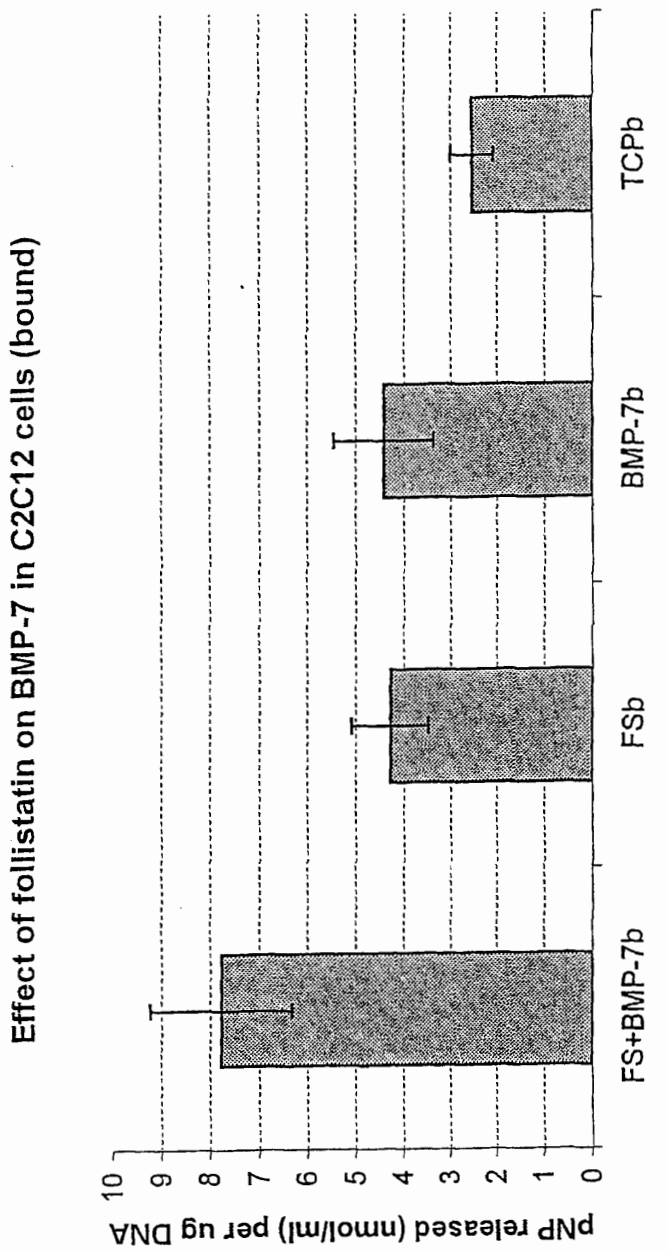

Effect of follistatin on BMP-7 in C2C12 cells (bound)
pNP released (nmol/ml) per ug DNA
0
1
2
3
4
5
6
7
8
9
10
FS+BMP-7b
FSb
BMP-7b
TCPb
Treatment

Figure 1.3d

Figure 1.4

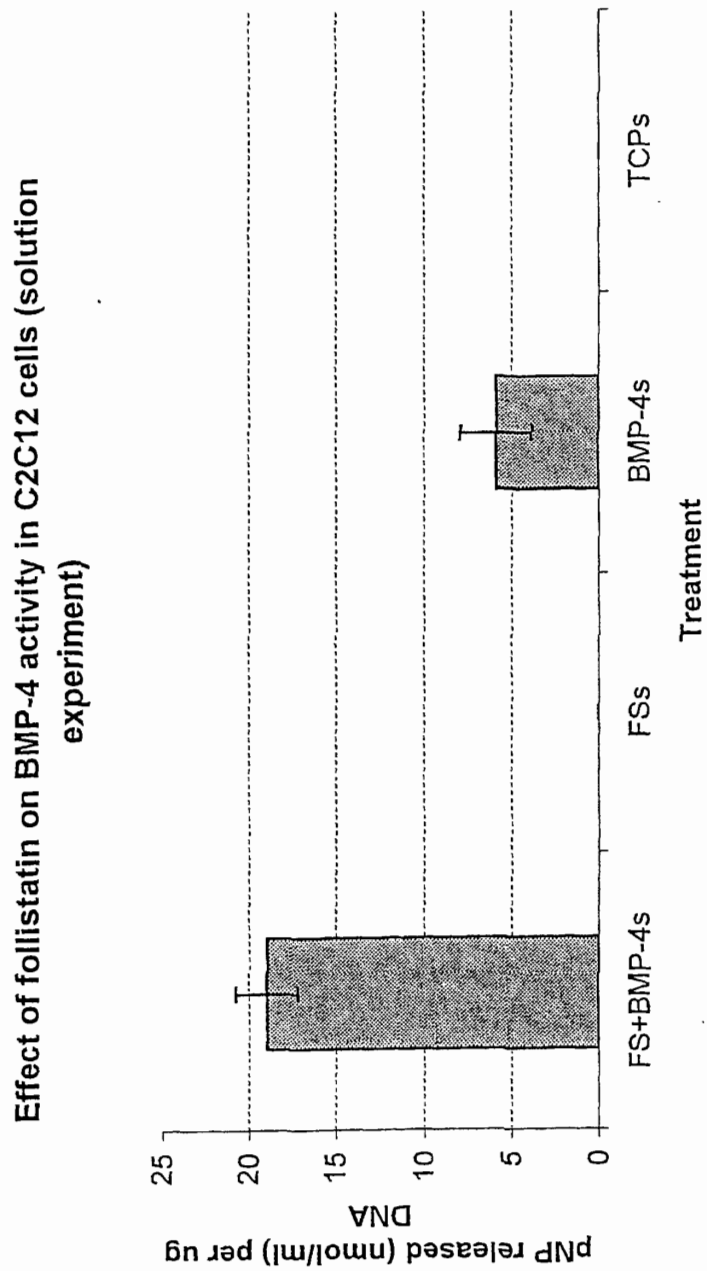
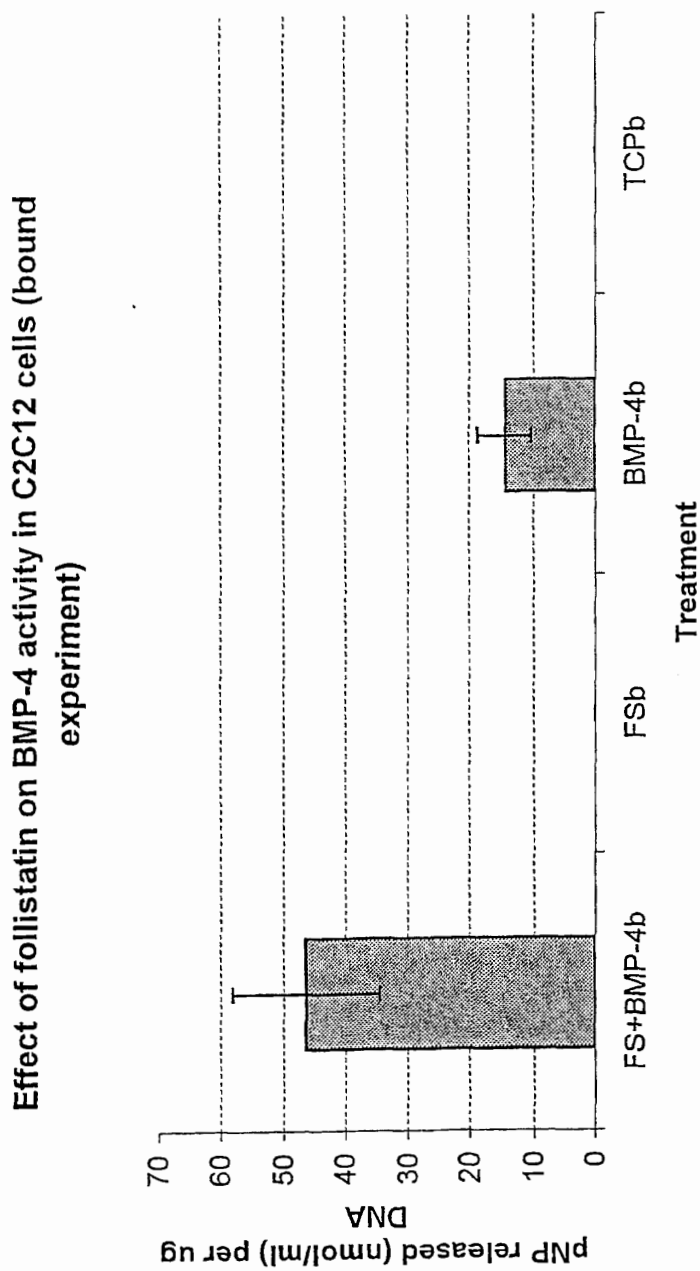

Effect of follistatin on BMP-4 activity in C2C12 cells (solution experiment)
pNP released (nmol/ml) per ug DNA
25
20
15
10
5
0
FS+BMP-4s
FSs
BMP-4s
TCPs
Treatment

Figure 1.5


Effect of follistatin on BMP-4 activity in C2C12 cells (bound experiment)
pNP released (nmol/ml) per ug DNA
70
60
50
40
30
20
10
0
FS+BMP-4b
FSb
BMP-4b
TCPb
Treatment

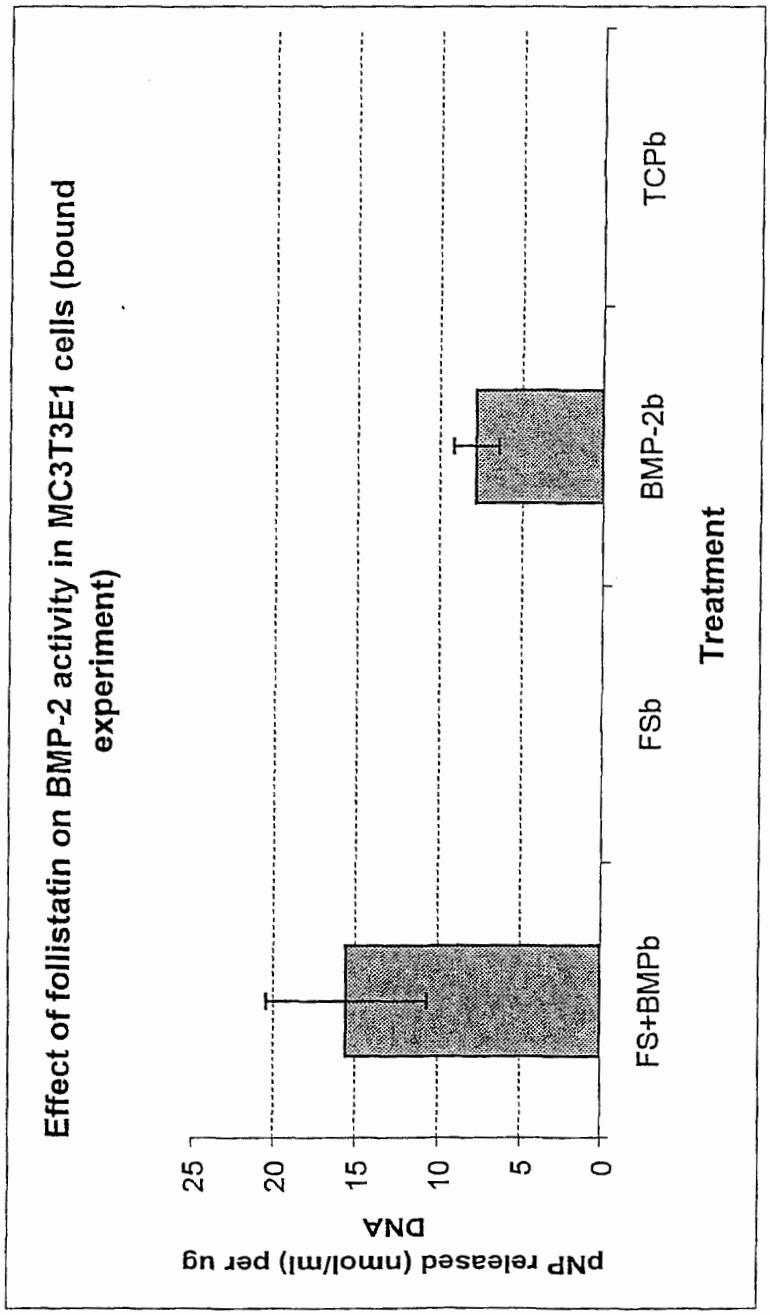

Effect of follistatin on BMP-2 activity in MC3T3E1 cells (bound experiment)
pNP released (nmol/ml) per ug DNA
25
20
15
10
5
0
FS+BMPb
FSb
BMP-2b
TCPb
Treatment

Figure 1.7

Figure 1.8

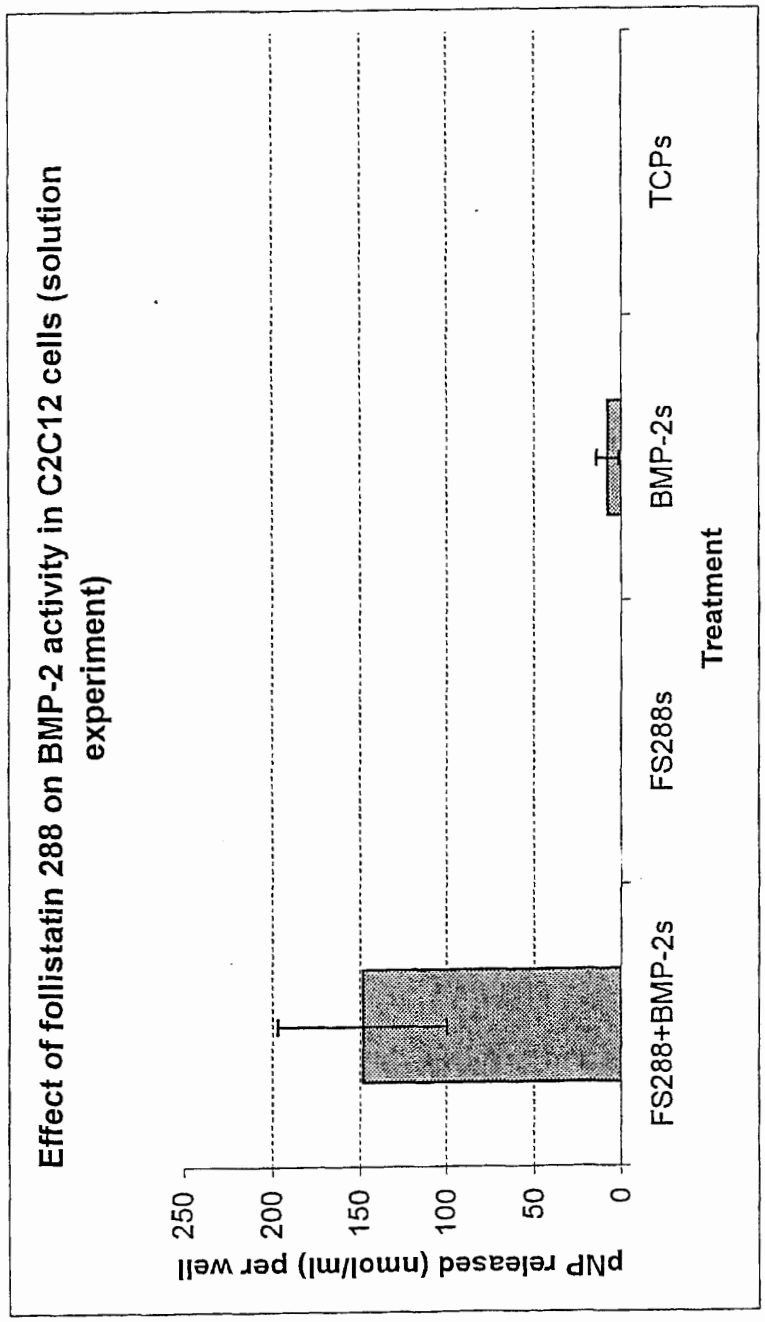
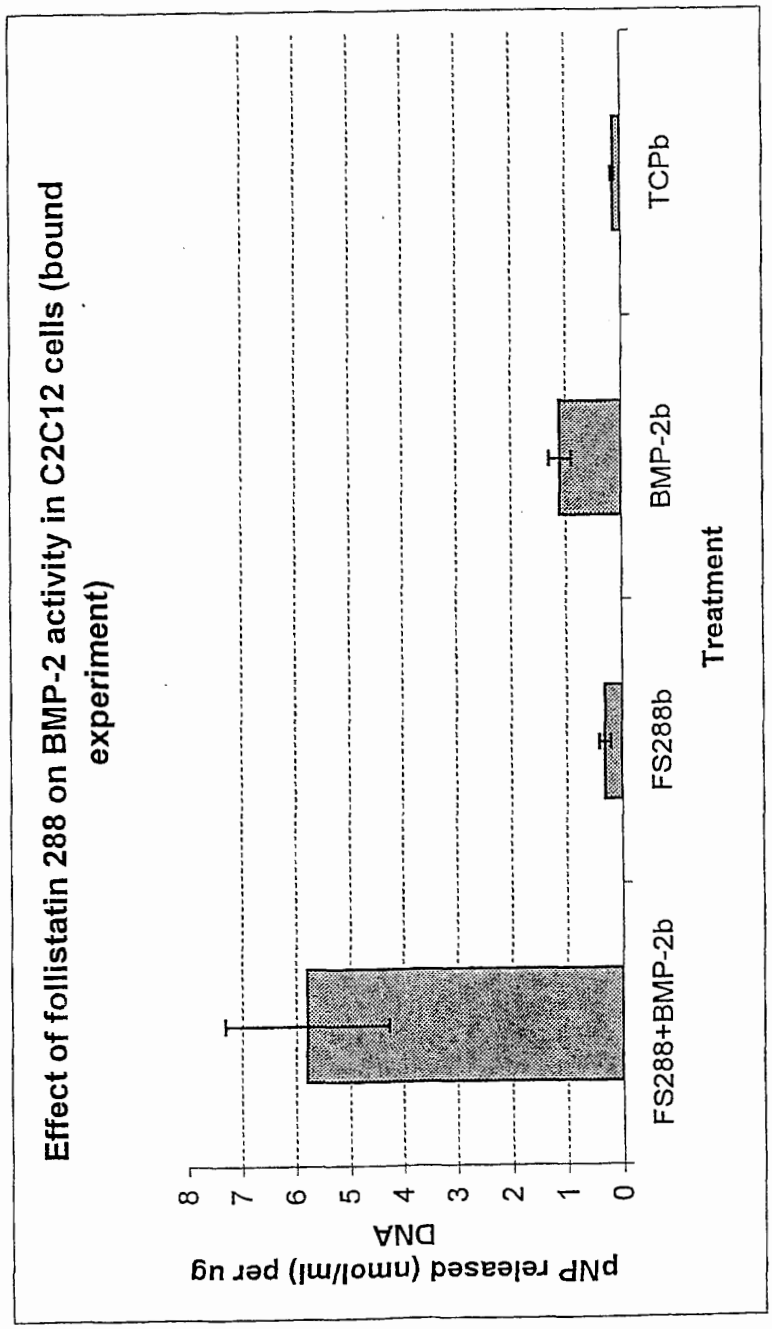

Effect of follistatin 288 on BMP-2 activity in C2C12 cells (solution experiment)
pNP released (nmol/ml) per well
250
200
150
100
50
0
FS288+BMP-2s
FS288s
BMP-2s
TCPs
Treatment

Figure 1.9


Effect of follistatin 288 on BMP-2 activity in C2C12 cells (bound experiment)
pNP released (nmol/ml) per ug DNA
0
1
2
3
4
5
6
7
8
FS288+BMP-2b
FS288b
BMP-2b
TCPb
Treatment

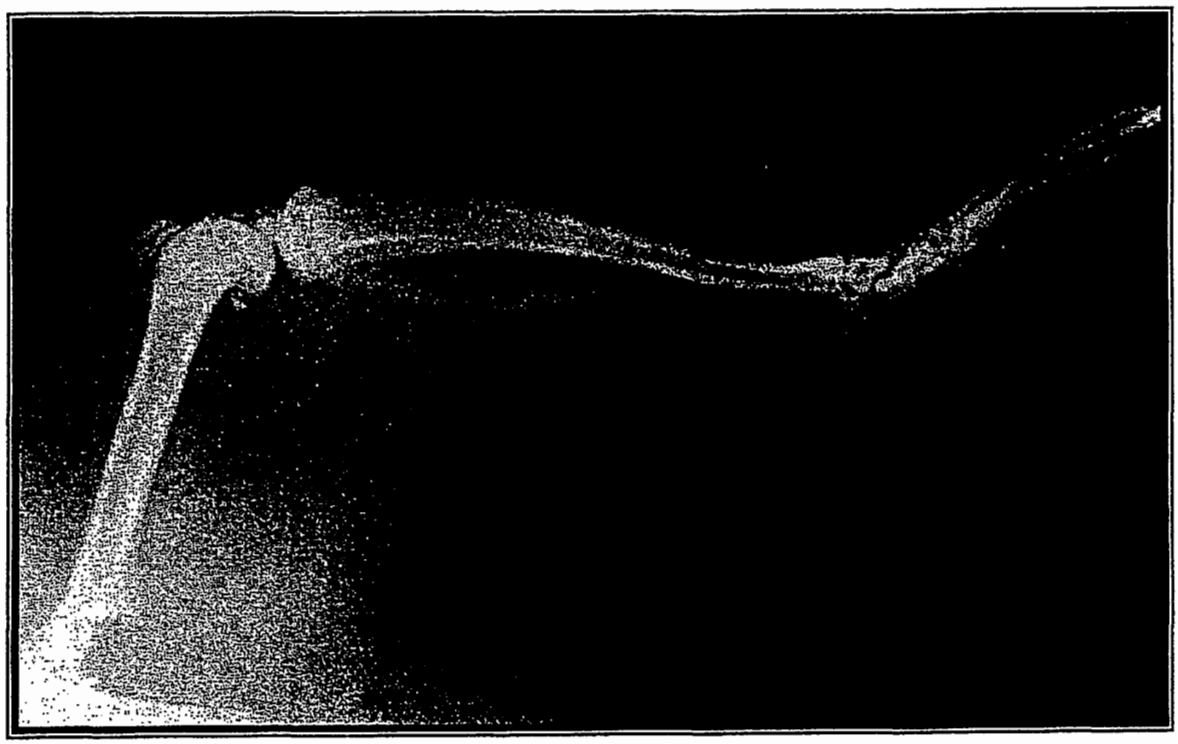


Figure 1.10b

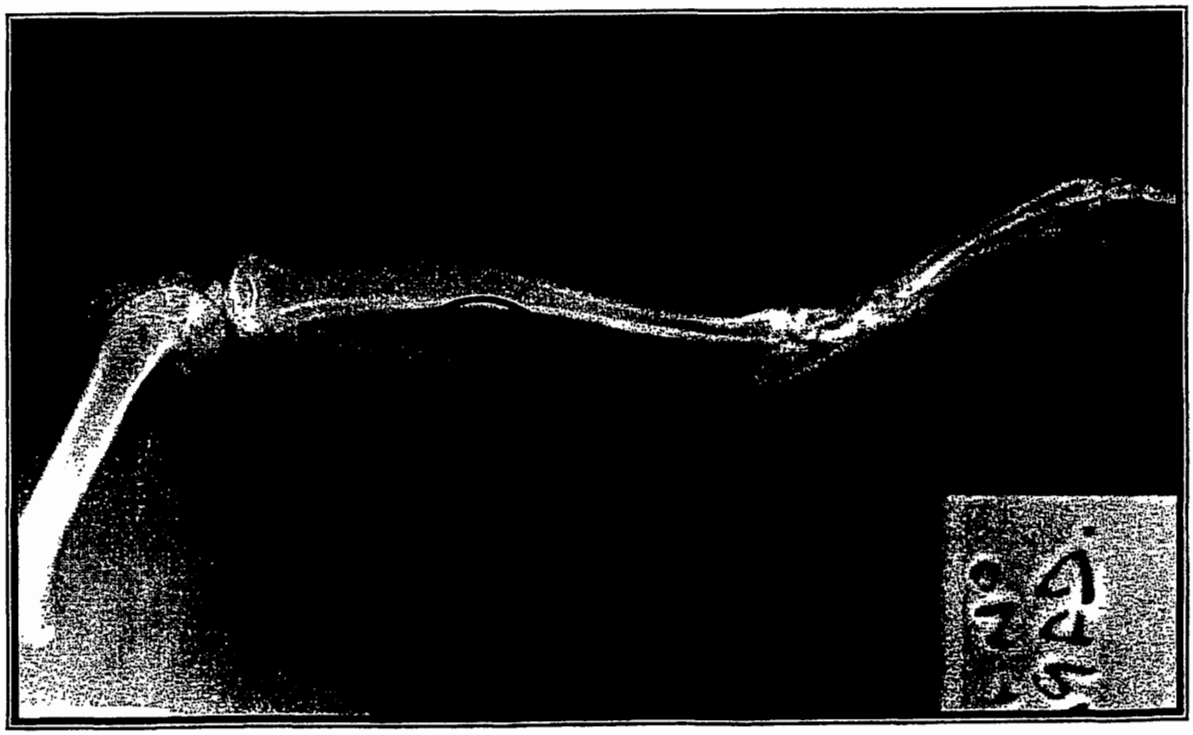


Figure 1.10a

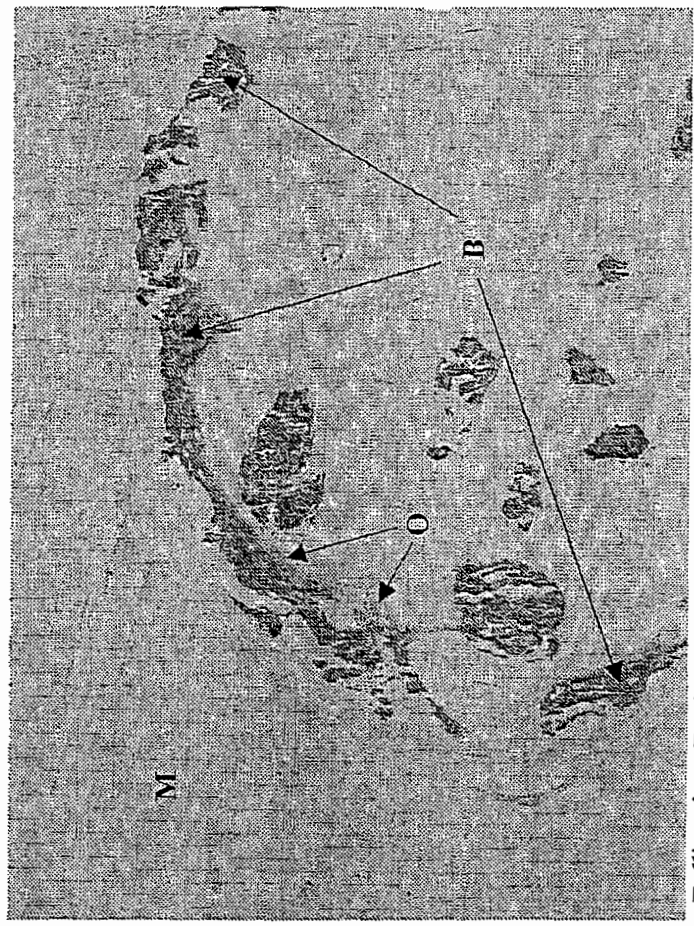


Figure 1.10d Follistatin + BMP-2, x100 mag

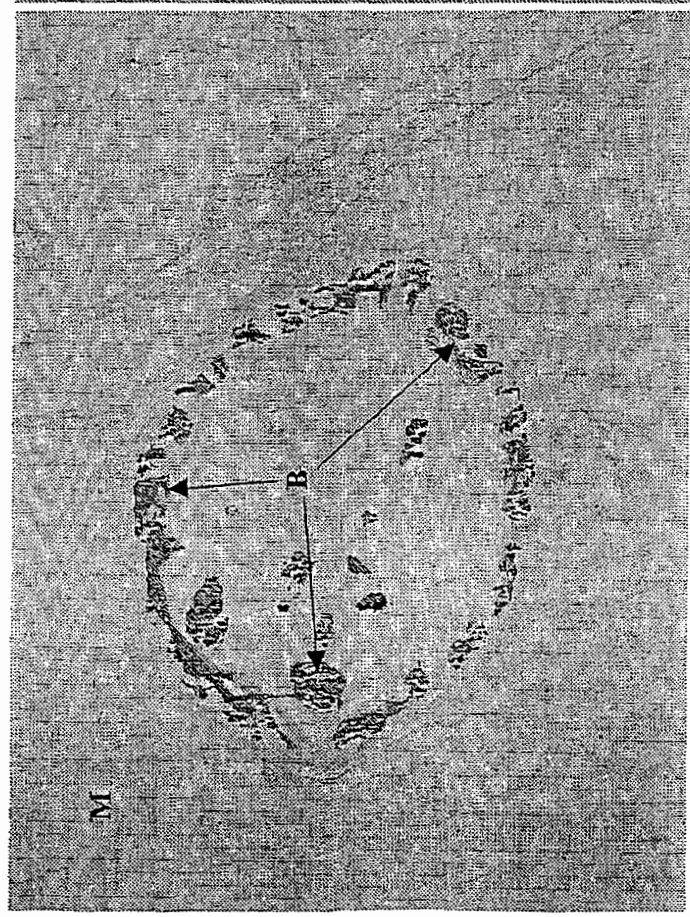


Figure 1.10c Follistain + BMP-2, x50 mag

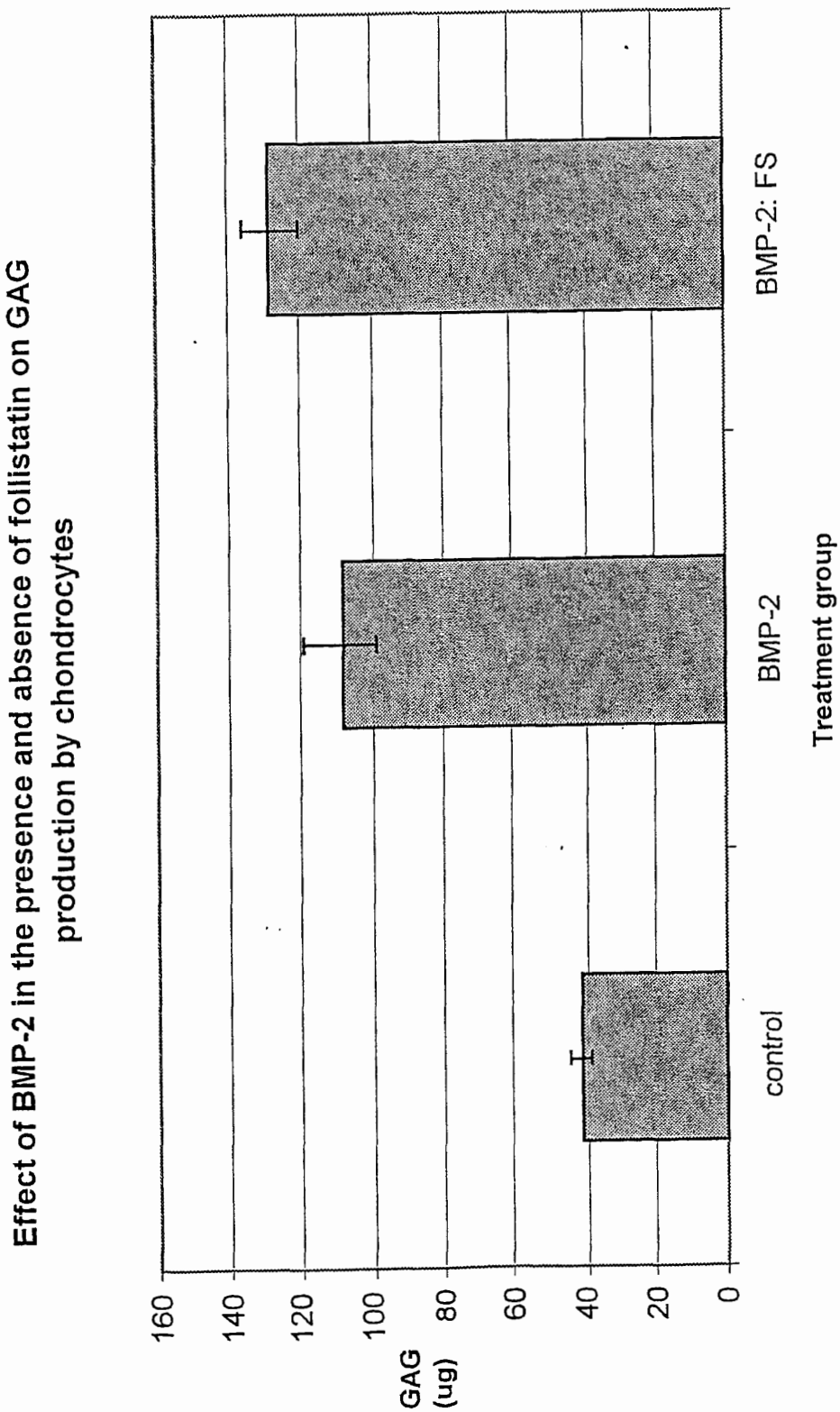

Effect of BMP-2 in the presence and absence of follistatin on GAG production by chondrocytes
GAG (ug)
160
140
120
100
80
60
40
20
0
control
BMP-2
BMP-2: FS
Treatment group

Fig 2.2a

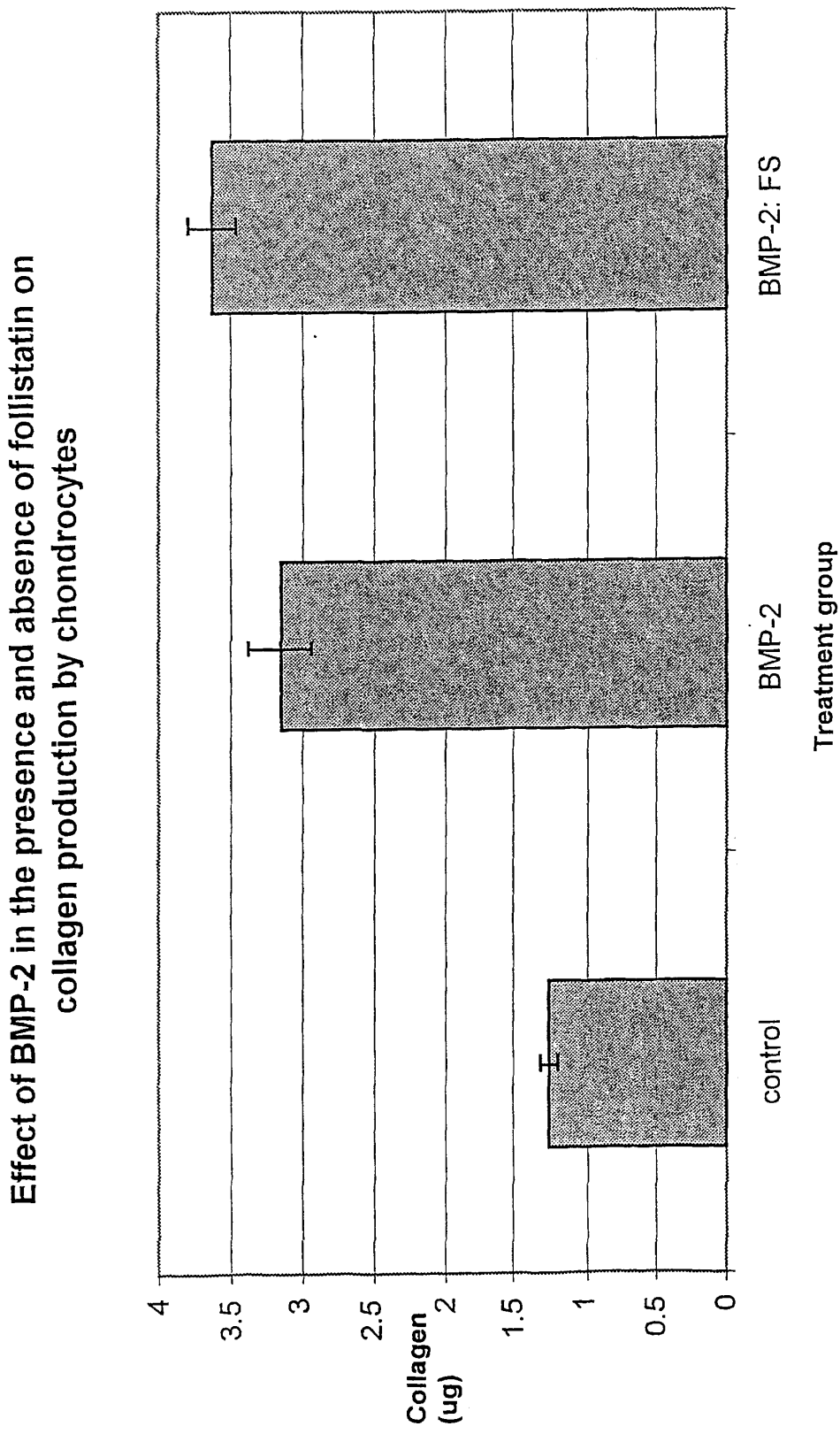

Effect of BMP-2 in the presence and absence of follistatin on collagen production by chondrocytes
Collagen (ug)
4
3.5
3
2.5
2
1.5
1
0.5
0
control
BMP-2
BMP-2: FS
Treatment group

Fig 2.2b

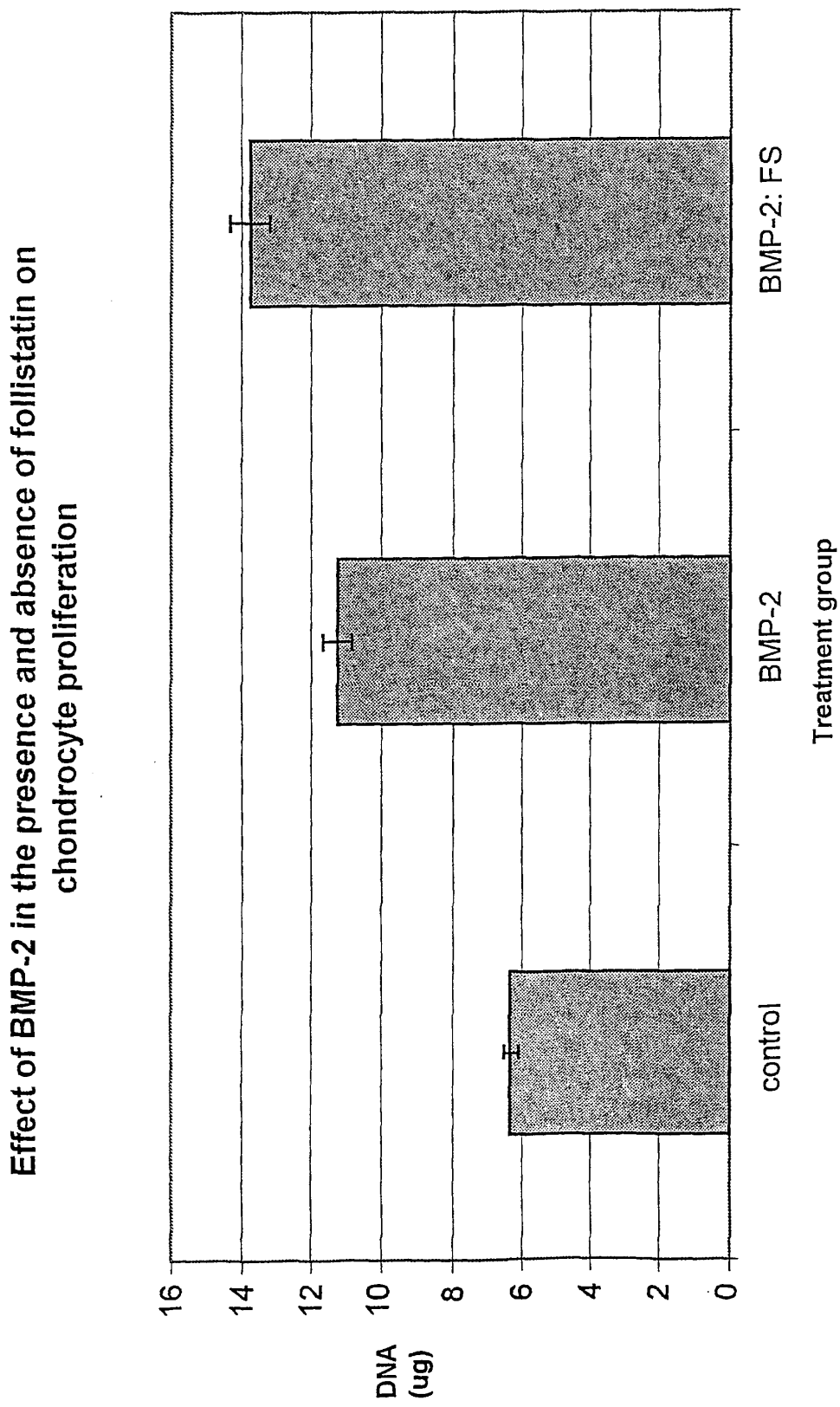

Effect of BMP-2 in the presence and absence of follistatin on chondrocyte proliferation
DNA (ug)
16
14
12
10
8
6
4
2
0
control
BMP-2
BMP-2: FS
Treatment group

Fig 2.2c

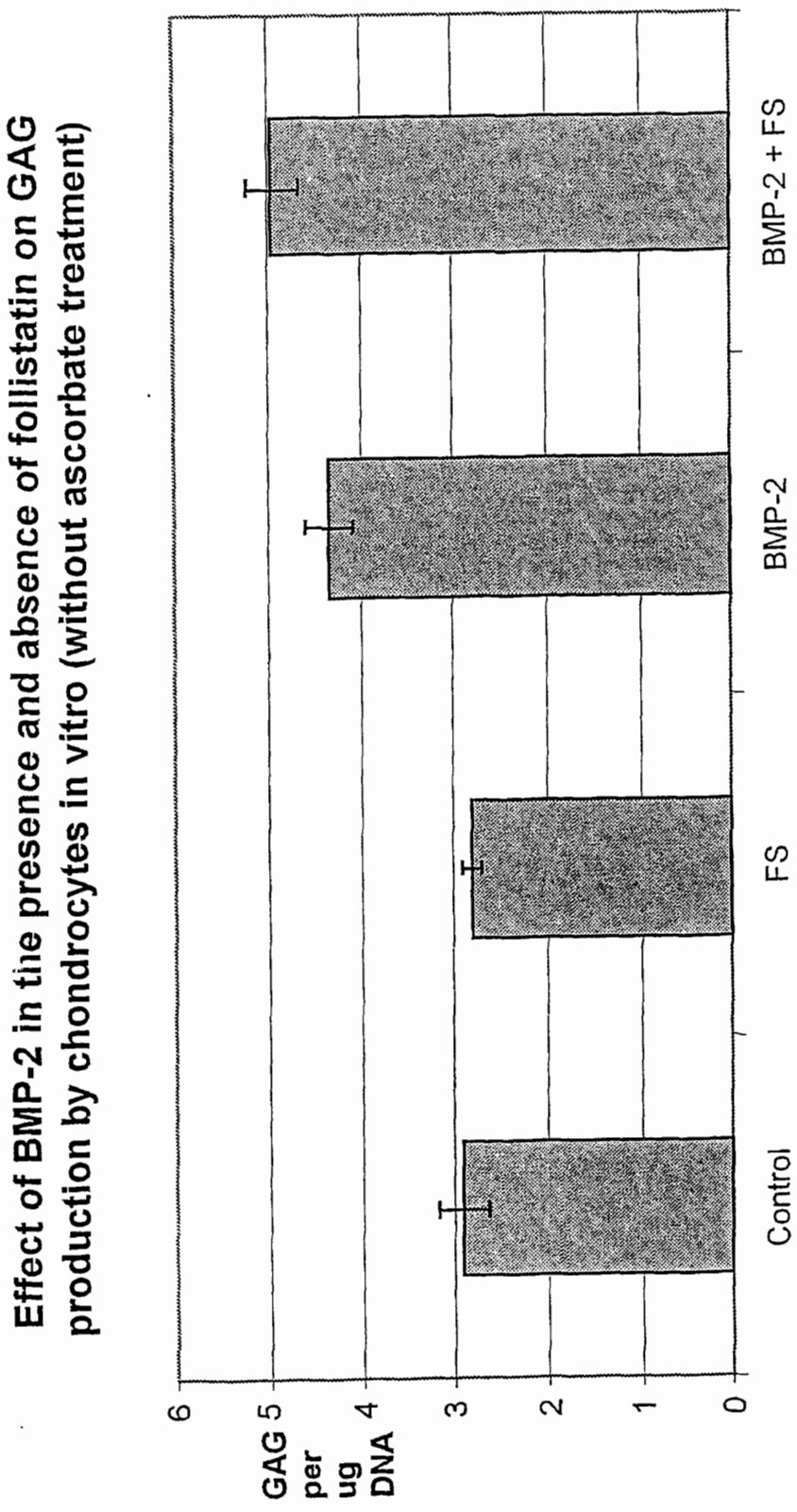

Effect of BMP-2 in the presence and absence of follistatin on GAG production by chondrocytes in vitro (without ascorbate treatment)
GAG per ug DNA
0
1
2
3
4
5
6
Control
FS
BMP-2
BMP-2 + FS
Treatment group

Fig 2.3a

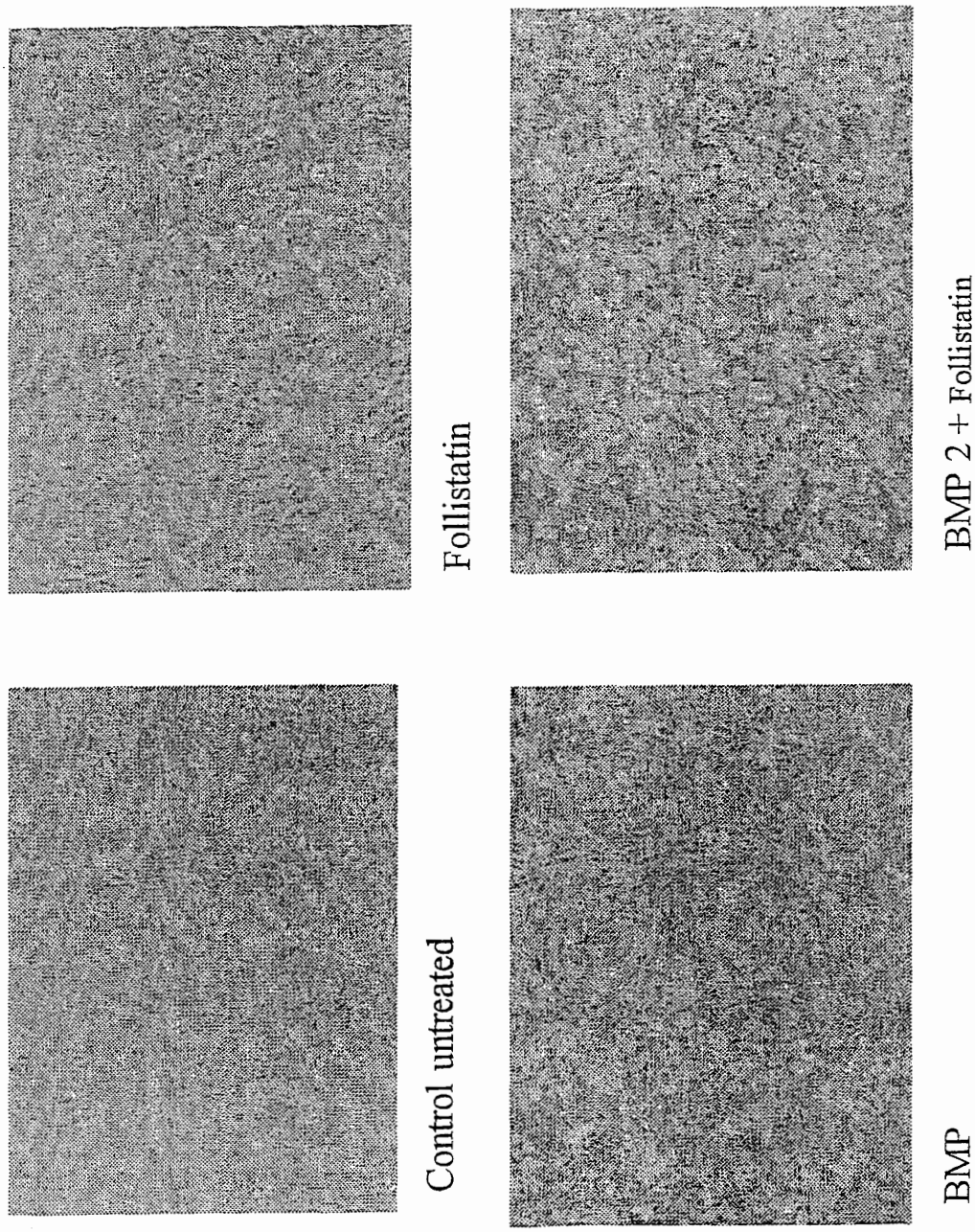


Fig 2.3b

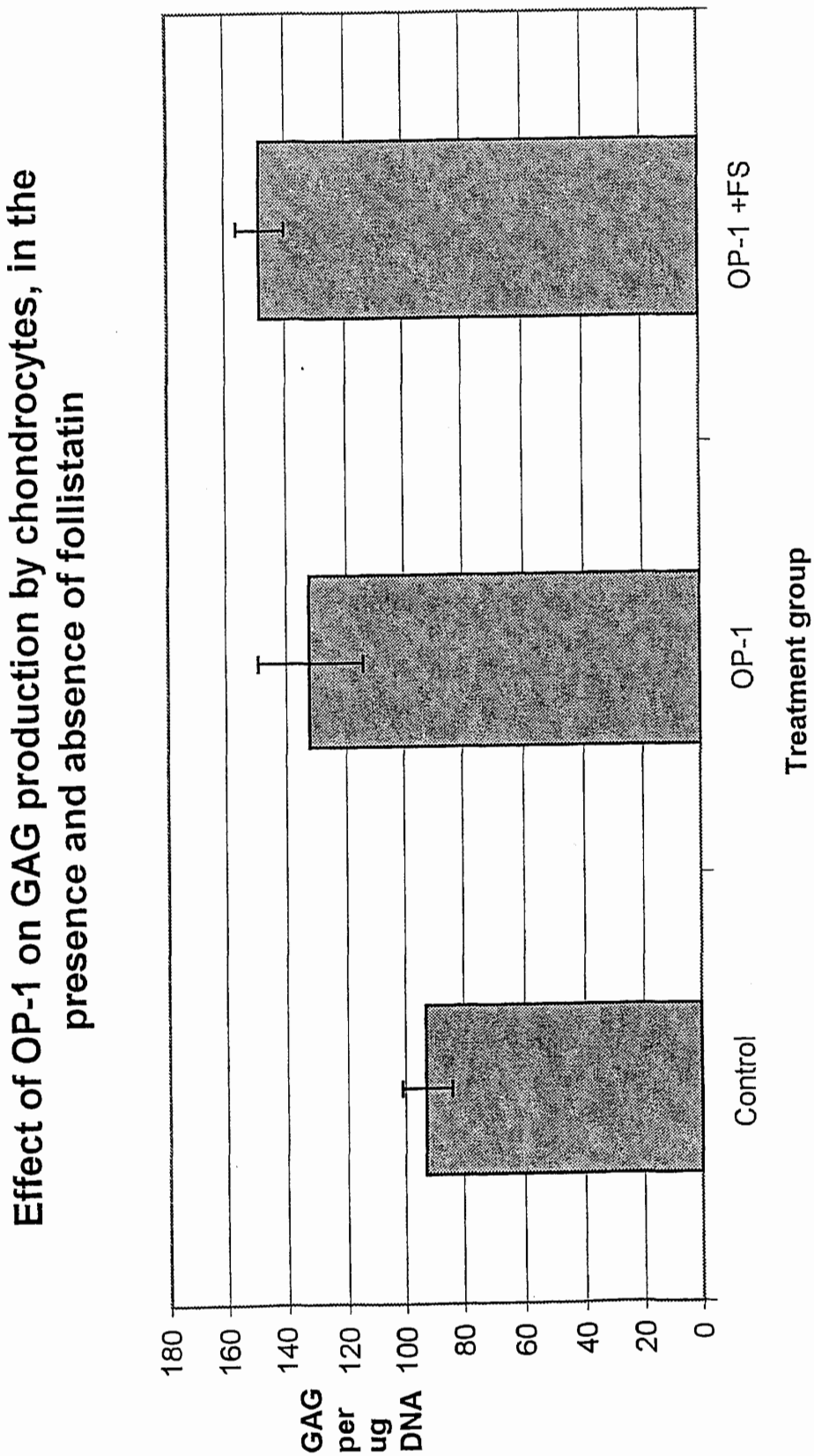

Effect of OP-1 on GAG production by chondrocytes, in the presence and absence of follistatin
GAG per ug DNA
180
160
140
120
100
80
60
40
20
0
Control
OP-1
OP-1 +FS
Treatment group

Figure 2.4