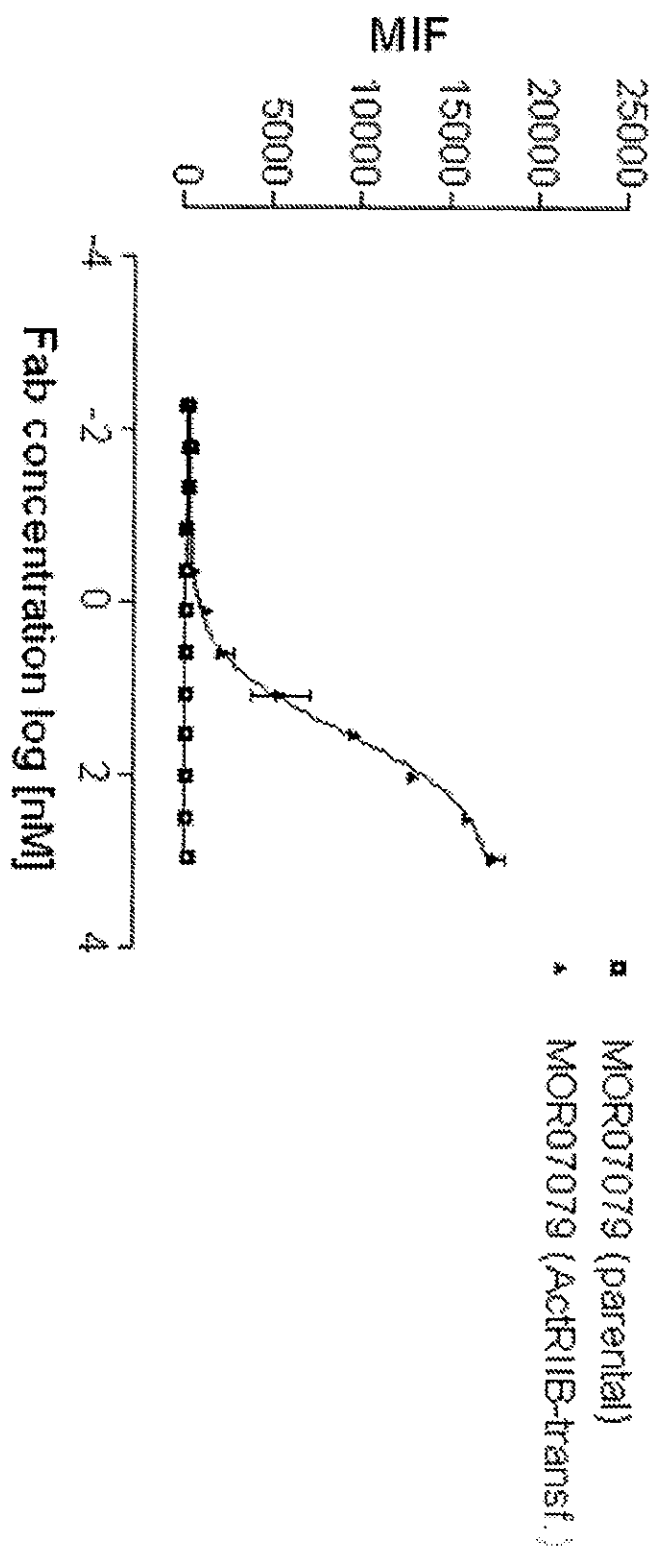
Figure 1


MIF
25000
20000
15000
10000
5000
0
-4
-2
0
2
4
Fab concentration log [nM]
MOR07079 (parental)
MOR07079 (ActRIIB-transf.)

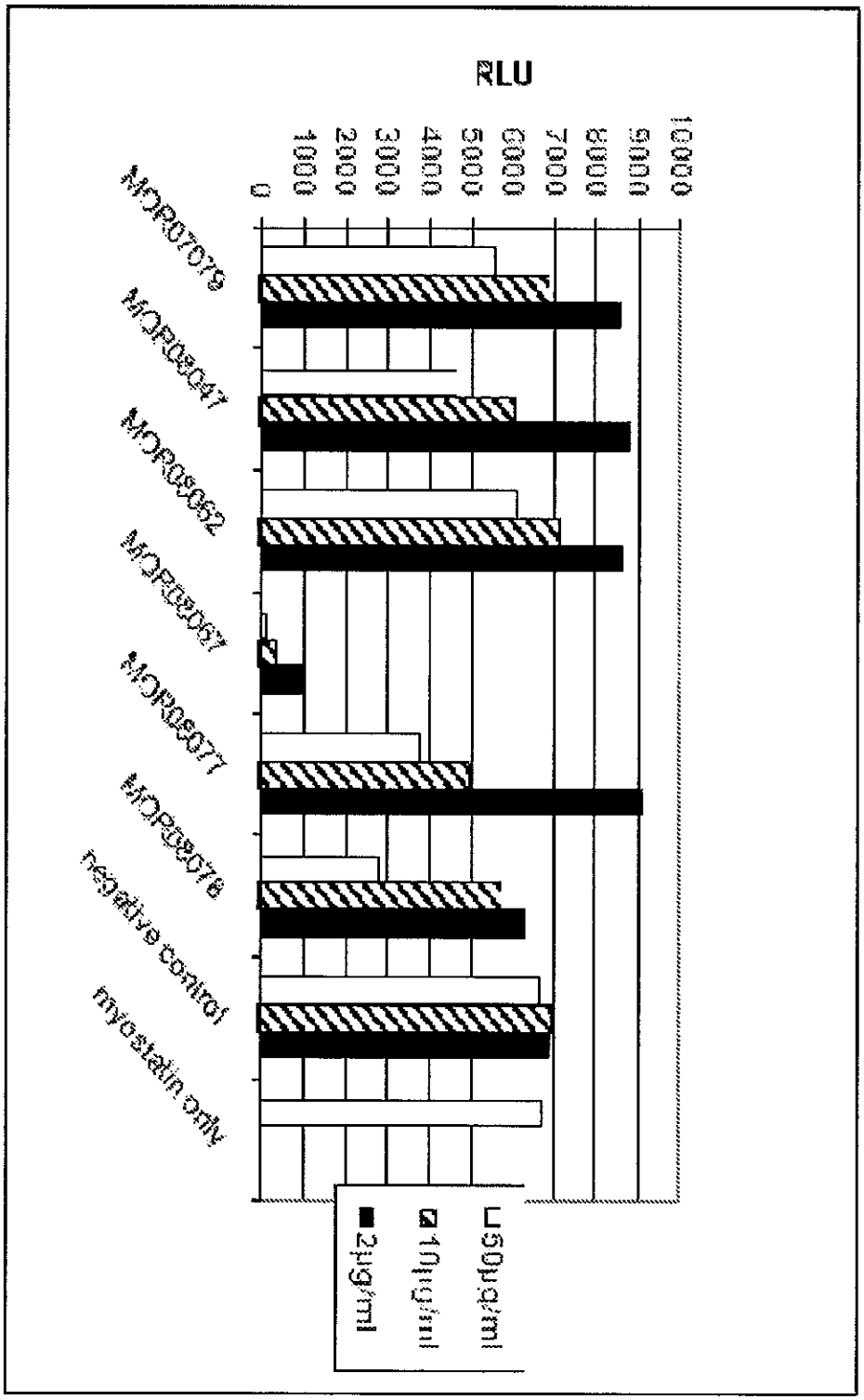
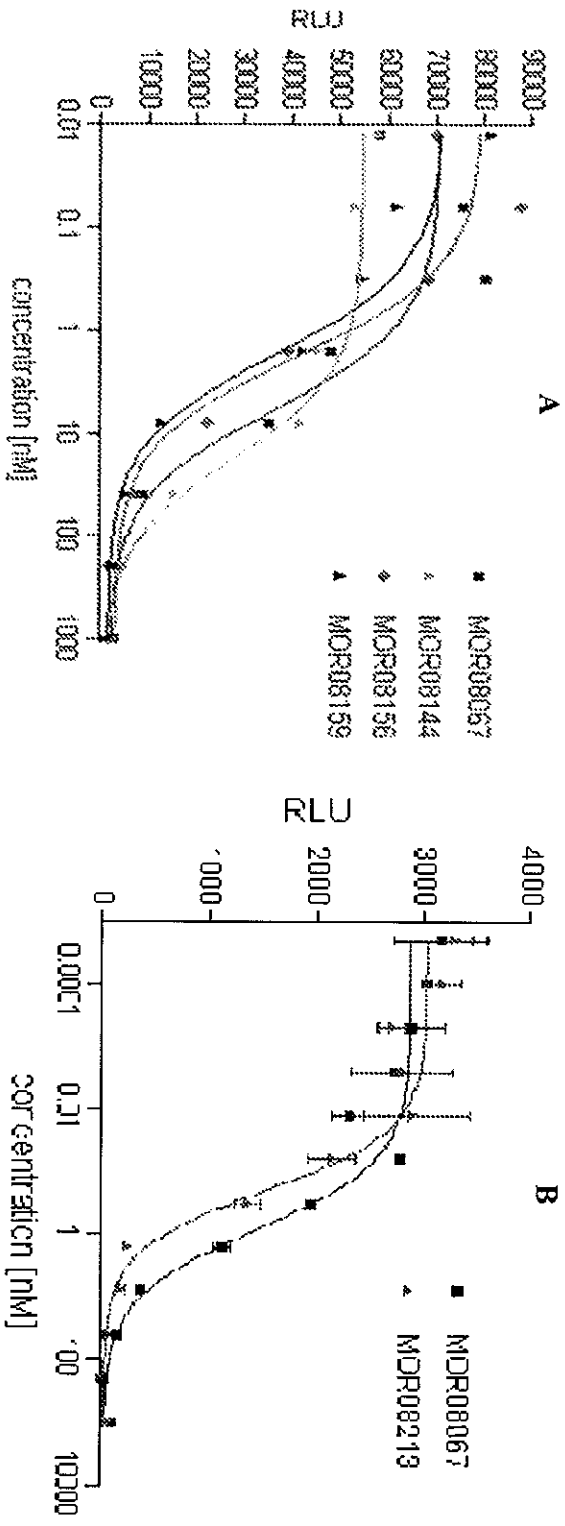

RLU
0
1000
2000
3000
4000
5000
6000
7000
8000
9000
10000
MOPR07079
MOPR08047
MOPR05062
MOPR08067
MOPR05077
MOPR08078
negative control
myostatin only
2ug/ml
1ug/ml
500ng/ml

Figure 2

Figure 3


A
RLU
90000
80000
70000
60000
50000
40000
30000
20000
10000
0
0.01
0.1
1
10
100
1000
concentration [nM]
MDR08067
MDR08144
MDR08156
MDR08159
B
RLU
4000
3000
2000
1000
0
0.001
0.01
1
100
10000
concentration [nM]
MDR08067
MDR08213

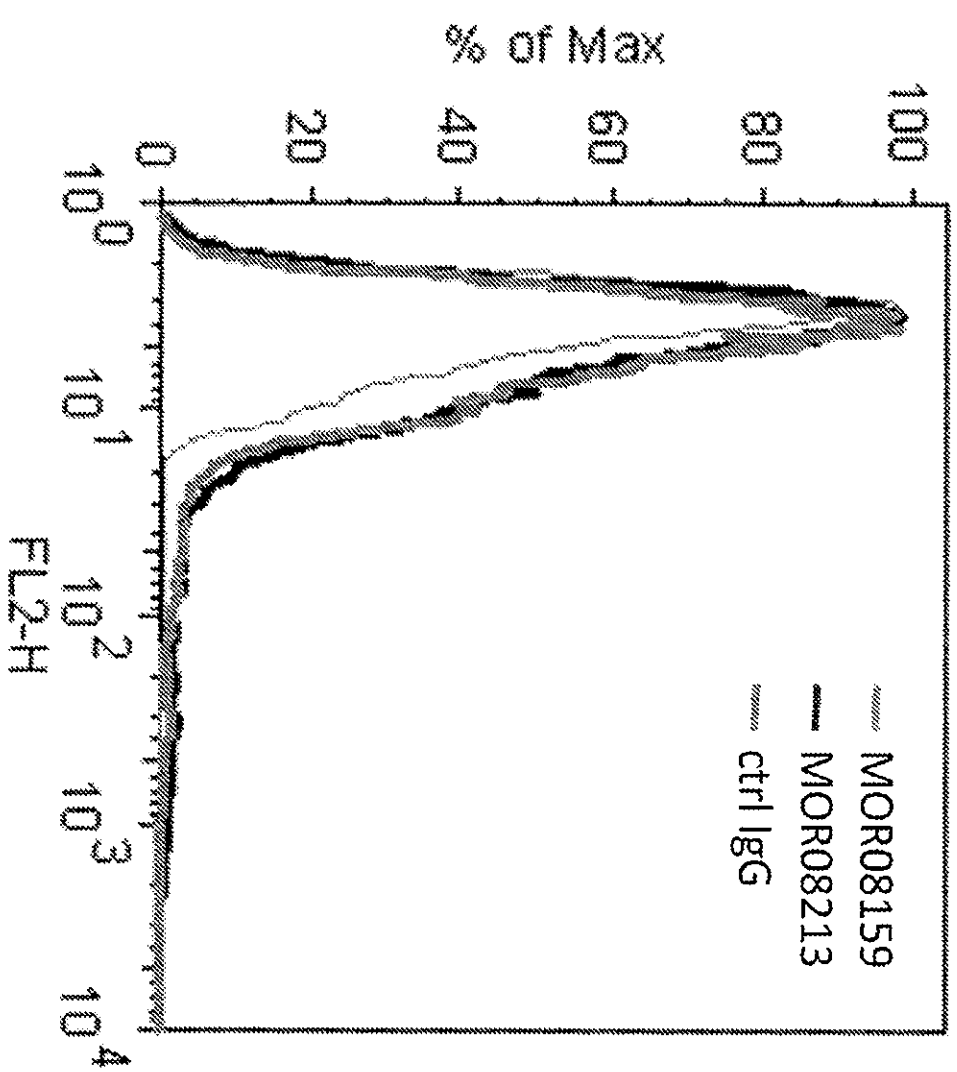

% of Max
0
20
40
60
80
100
FL2-H
10^0
10^1
10^2
10^3
10^4
MOR08159
MOR08213
ctrl IgG

Figure 4

Figure 5

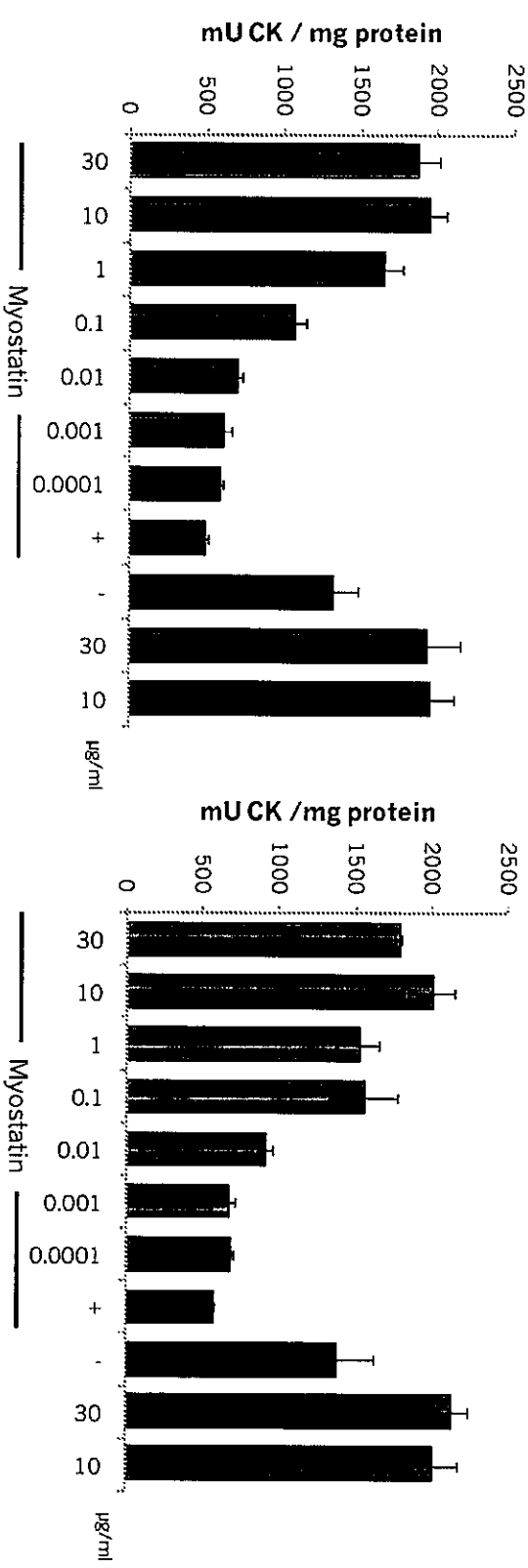

A
MOR08159
mU CK / mg protein
0
500
1000
1500
2000
2500
Myostatin
30
10
1
0.1
0.01
0.001
0.0001
+
-
30
10
µg/ml
B
MOR08213
mU CK /mg protein
0
500
1000
1500
2000
2500
Myostatin
30
10
1
0.1
0.01
0.001
0.0001
+
-
30
10
µg/ml

Figure 6

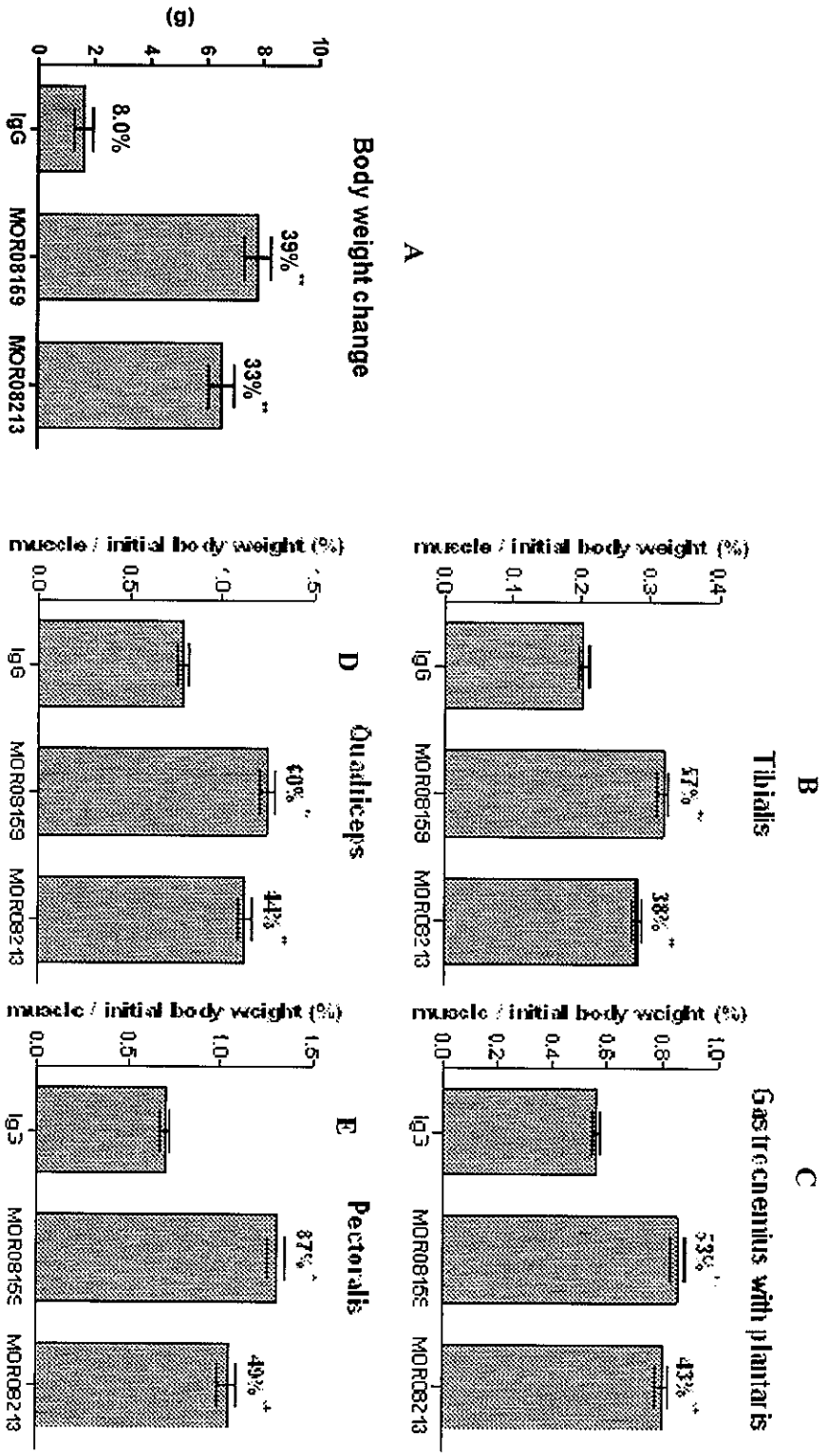
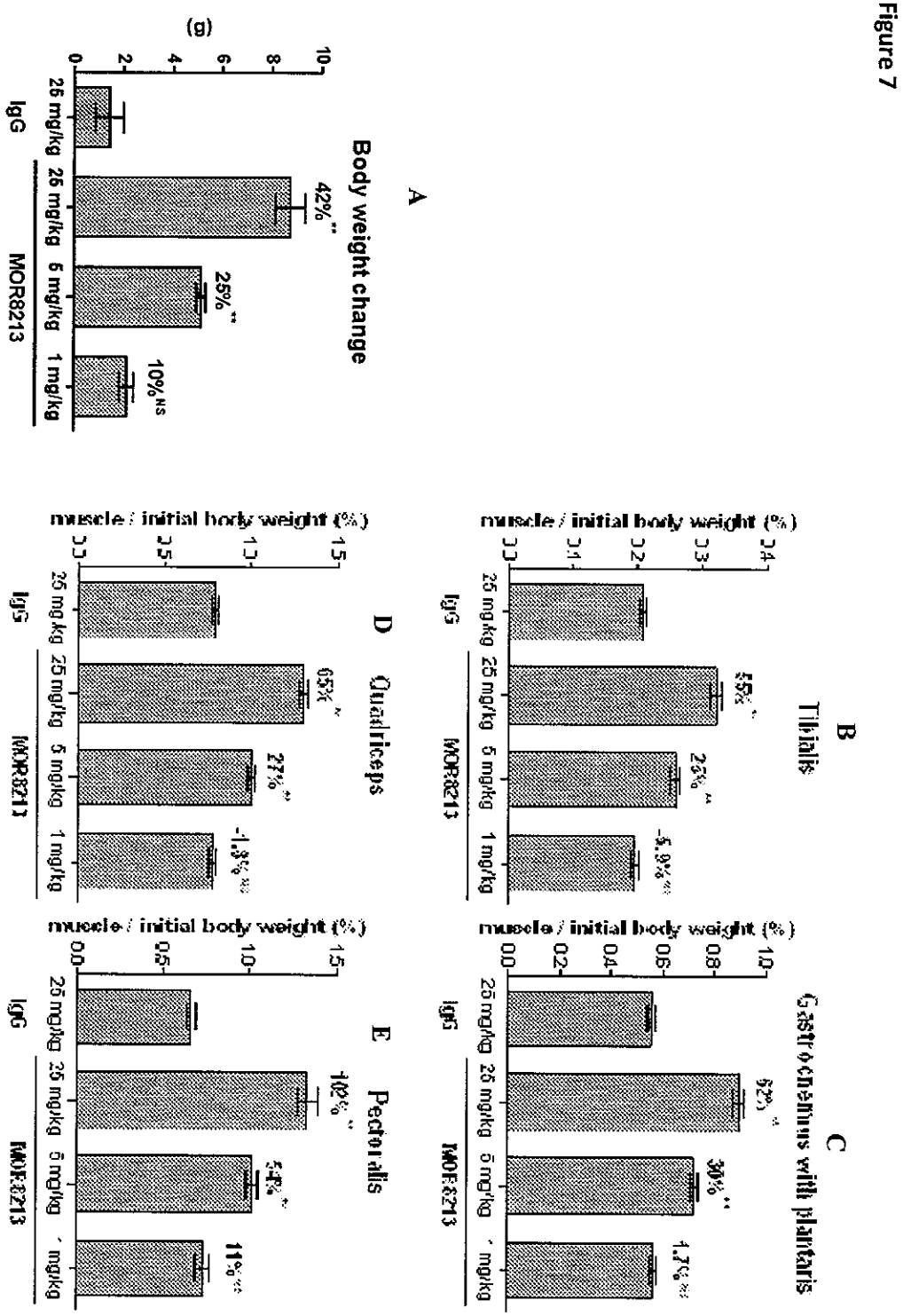

A
Body weight change
(g)
0
2
4
6
8
10
IgG
MOR08159
MOR08213
8.0%
39%**
33%**
B
Tibialis
muscle / initial body weight (%)
0.0
0.1
0.2
0.3
0.4
IgG
MOR08159
MOR08213
37%*
38%*
C
Gastrocnemius with plantaris
muscle / initial body weight (%)
0.0
0.2
0.4
0.6
0.8
1.0
IgG
MOR08159
MOR08213
53%*
43%*
D
Quadriceps
muscle / initial body weight (%)
0.0
0.5
1.0
1.5
IgG
MOR08159
MOR08213
40%*
44%*
E
Pectoralis
muscle / initial body weight (%)
0.0
0.5
1.0
1.5
IgG
MOR08159
MOR08213
87%*
49%*

Figure 7


A
Body weight change
(g)
42%**
25%**
10%NS
IgG
25 mg/kg
MOR8213
25 mg/kg
5 mg/kg
1 mg/kg
B
Tibialis
muscle / initial body weight (%)
55%*
25%**
-5.9%NS
C
Gastrocnemius with plantaris
52%*
30%**
1.7%NS
D
Quadriceps
65%*
27%**
-1.8%NS
E
Pectoralis
102%**
54%**
11%NS

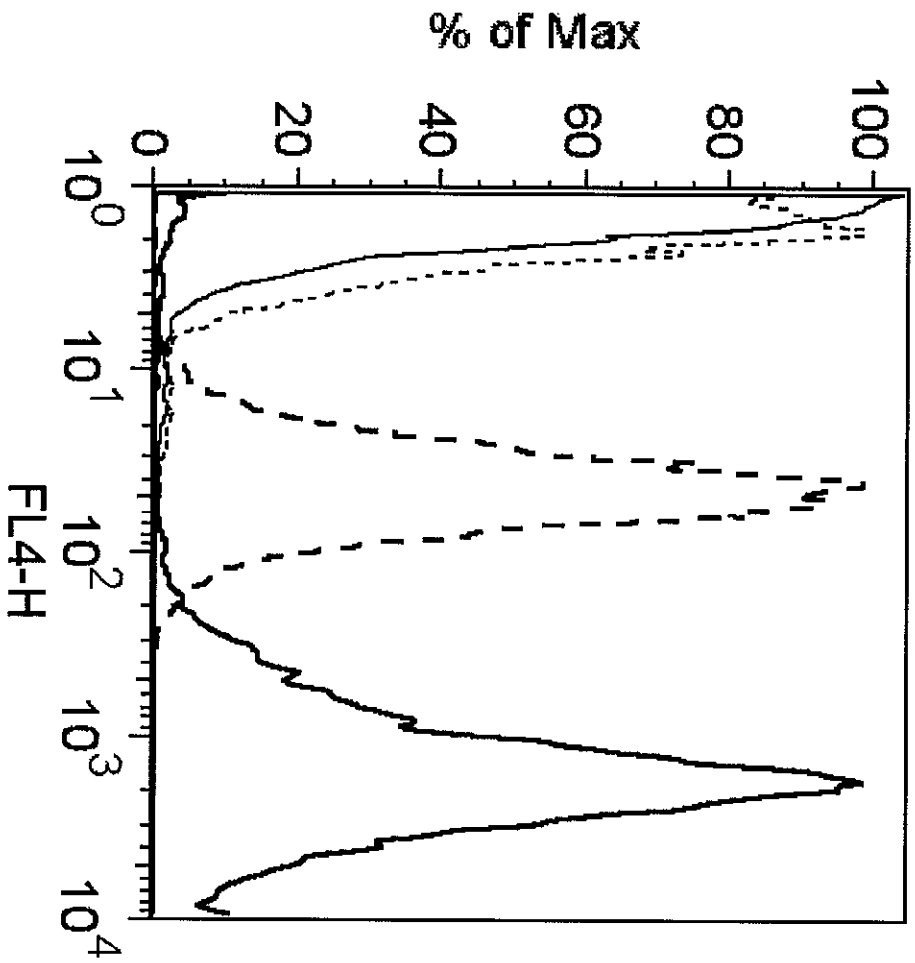
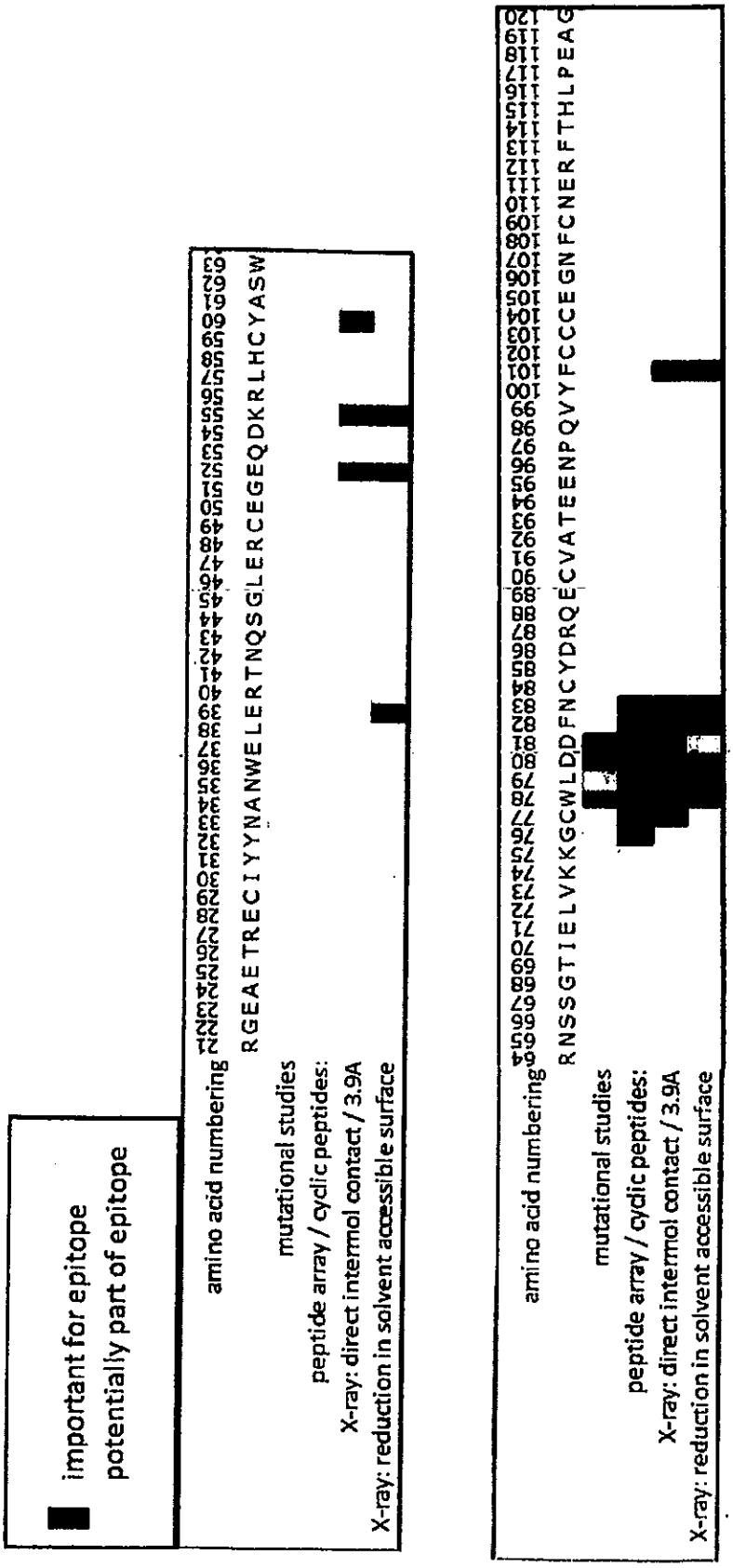


Figure 8

Figure 9


important for epitope
potentially part of epitope
amino acid numbering
RGEAETRECIYYNANWELERTNQSGLERCEGEQDKRLHCYASW
mutational studies
peptide array / cyclic peptides:
X-ray: direct intermol contact / 3.9A
X-ray: reduction in solvent accessible surface
amino acid numbering
RNSSGTIELVKKGCWLDDFNCYDRQECVATEENPQVYFCCCEGNFCNERFTHLPEAG
mutational studies
peptide array / cyclic peptides:
X-ray: direct intermol contact / 3.9A
X-ray: reduction in solvent accessible surface