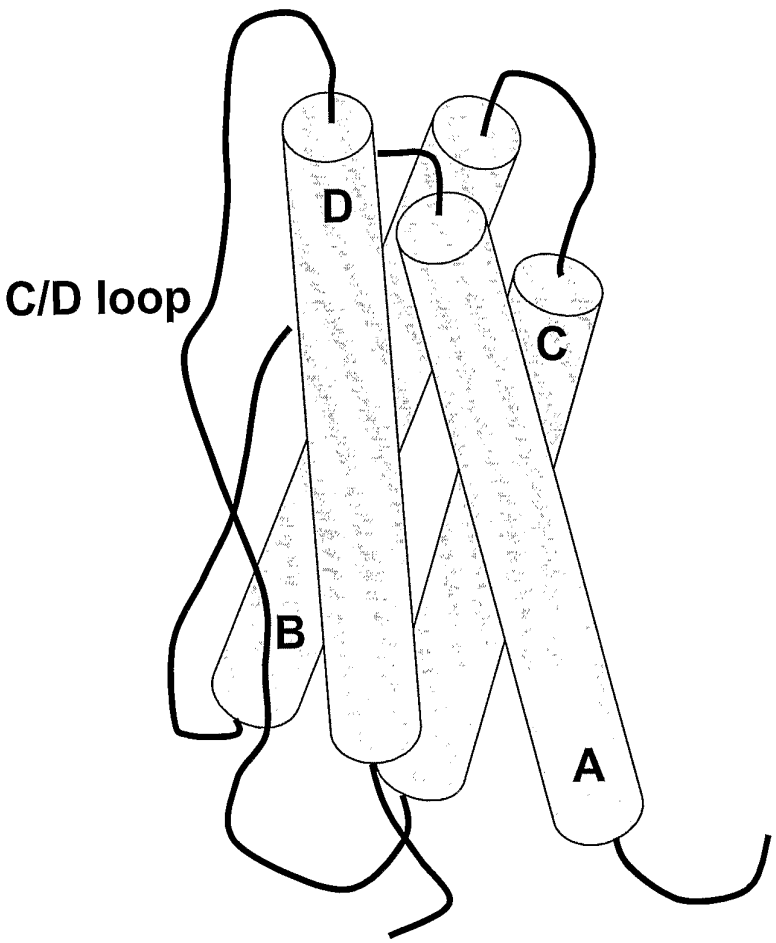
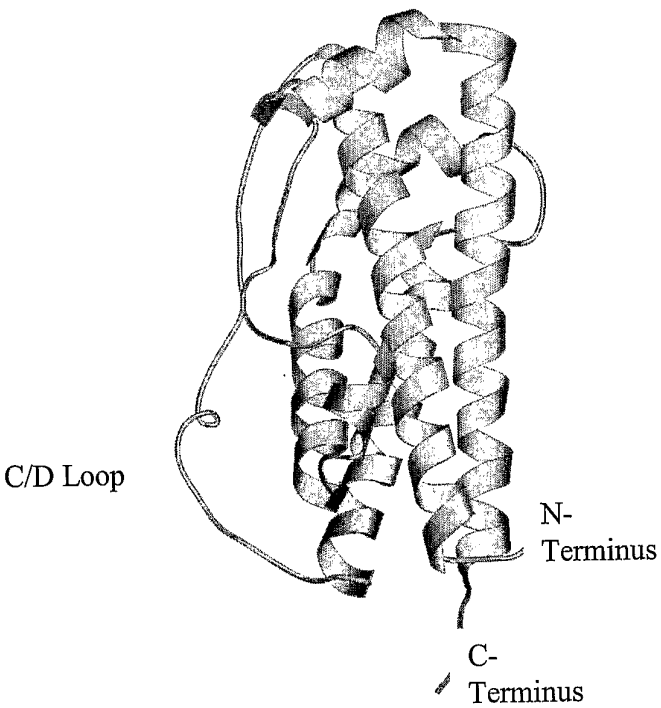
Figure 1



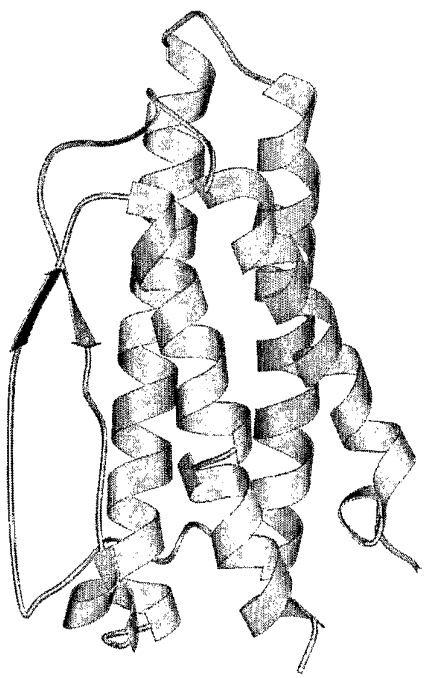
A Four Helical Bundle Protein

Figure 2



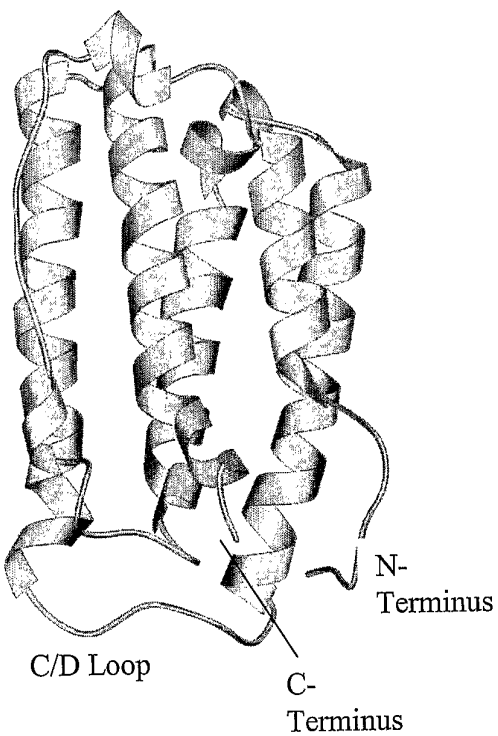
hGH

Figure 3



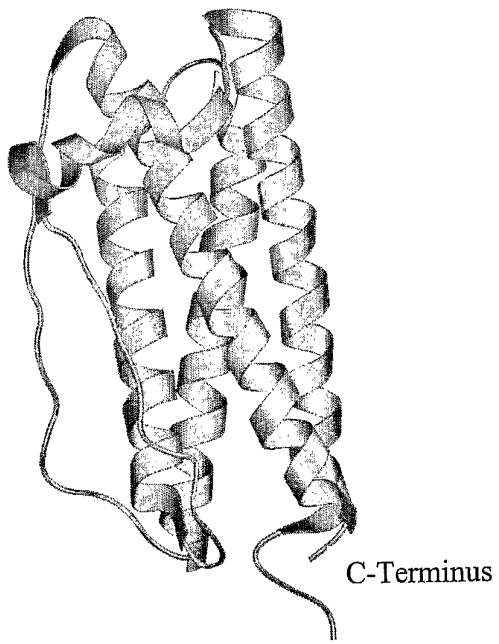
EPO

Figure 4



IFNα-2

Figure 5



G-CSF

Figure 6

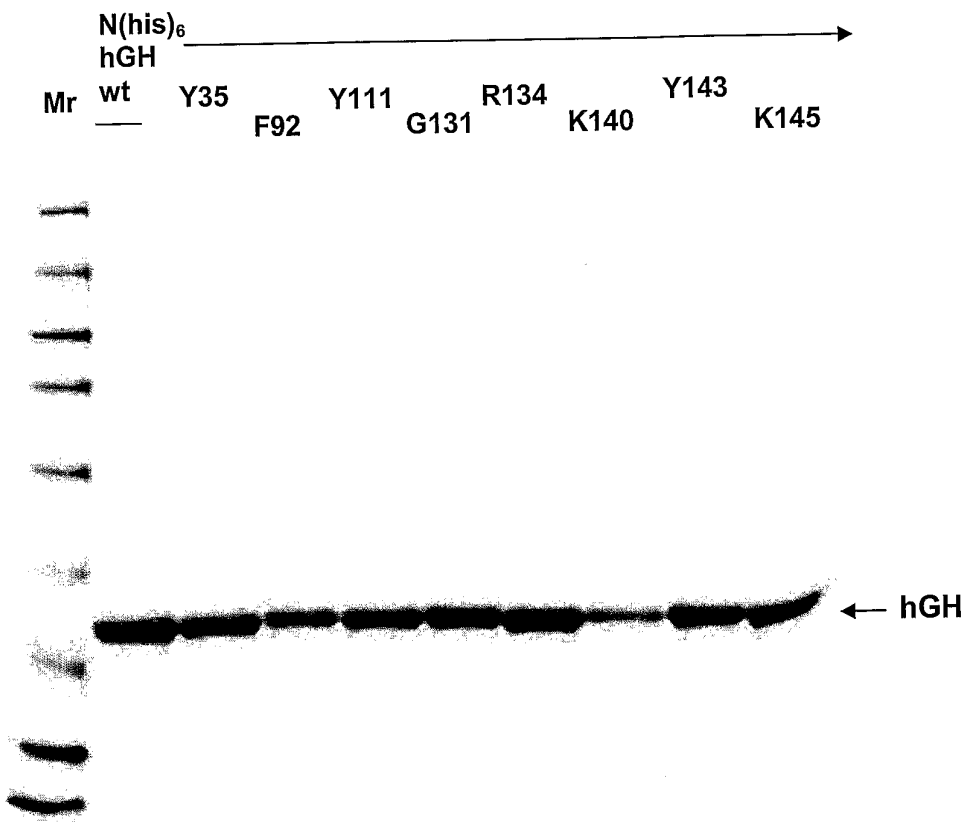


Figure 7, Panel A:

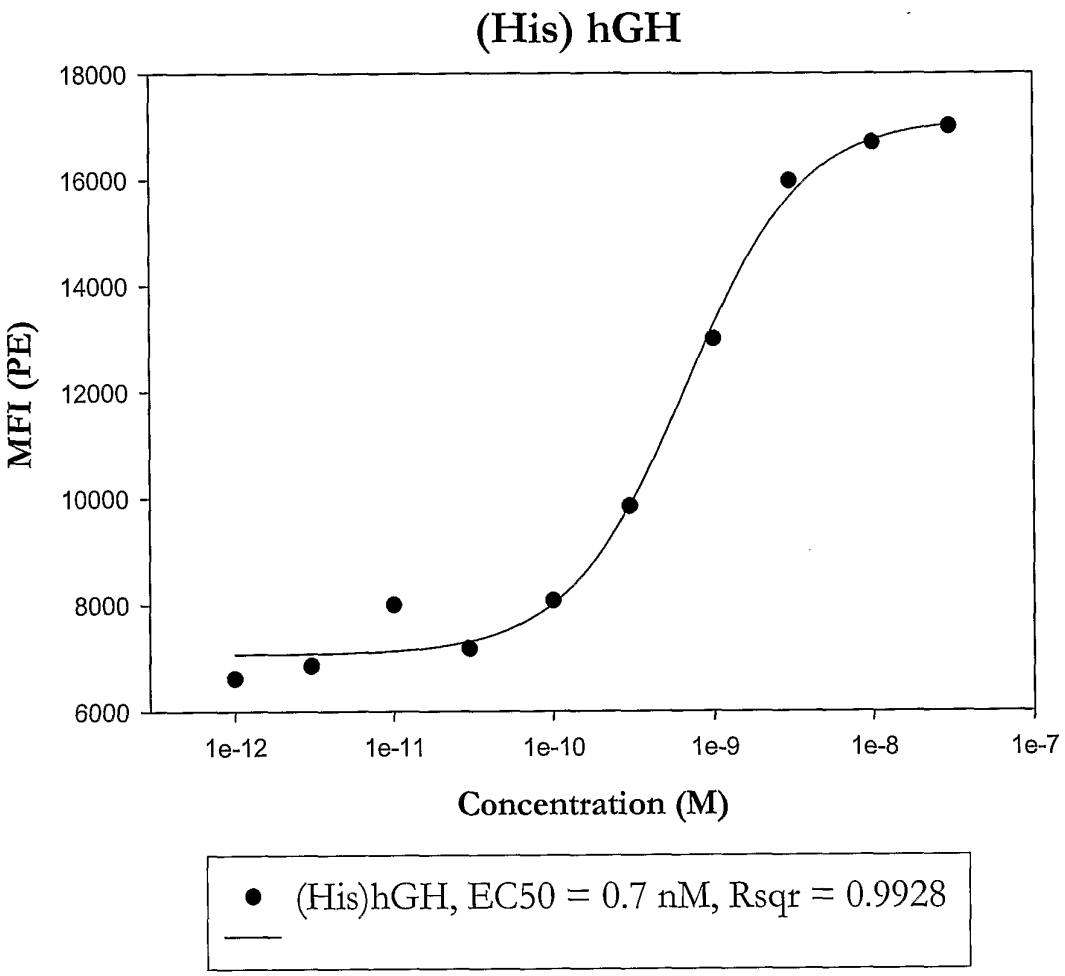


Figure 7, Panel B:

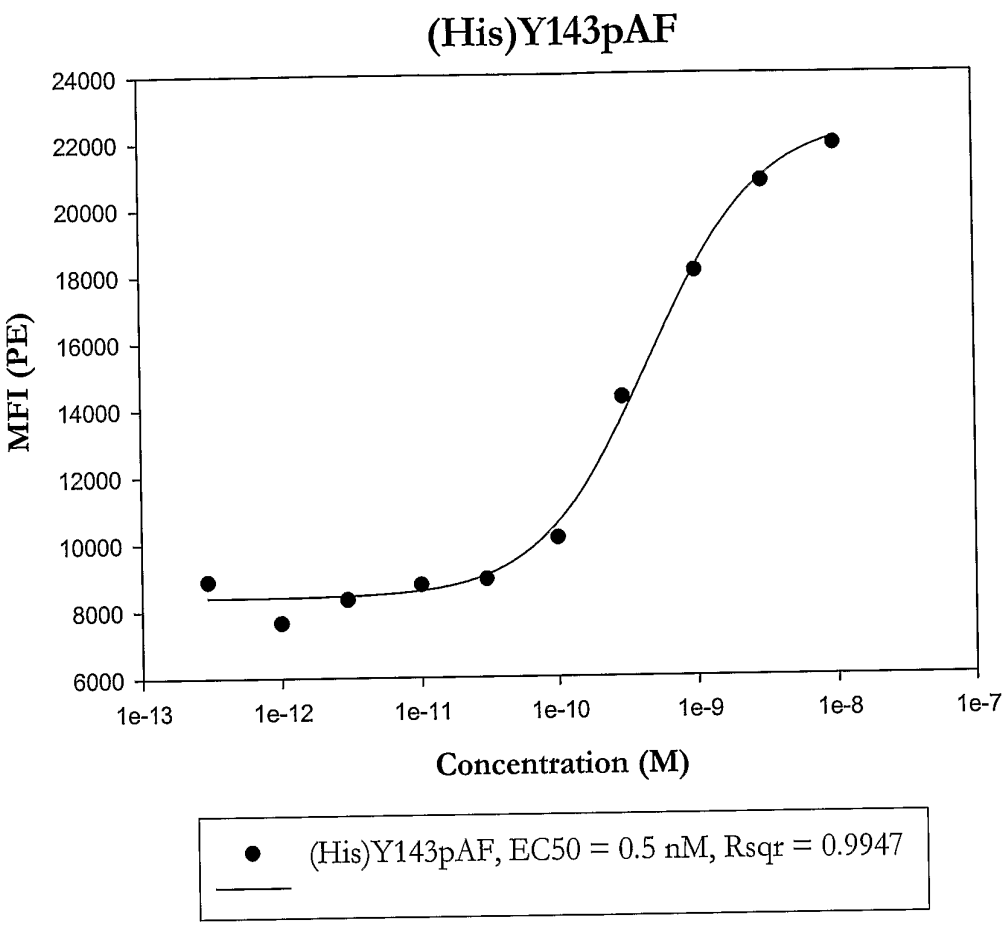


Figure 8

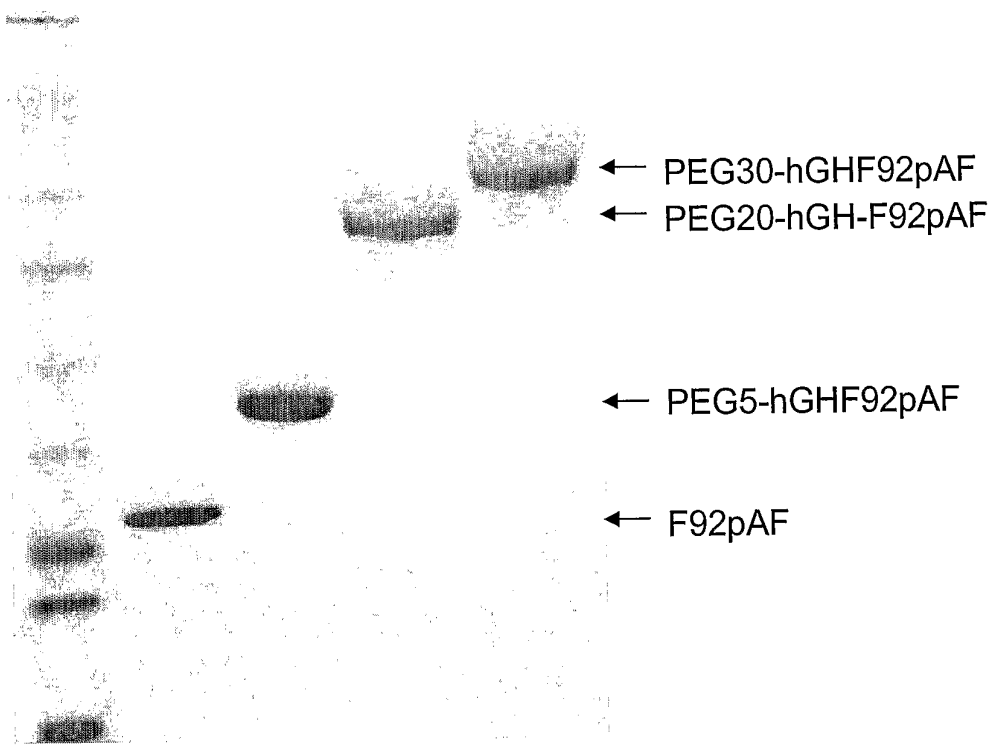
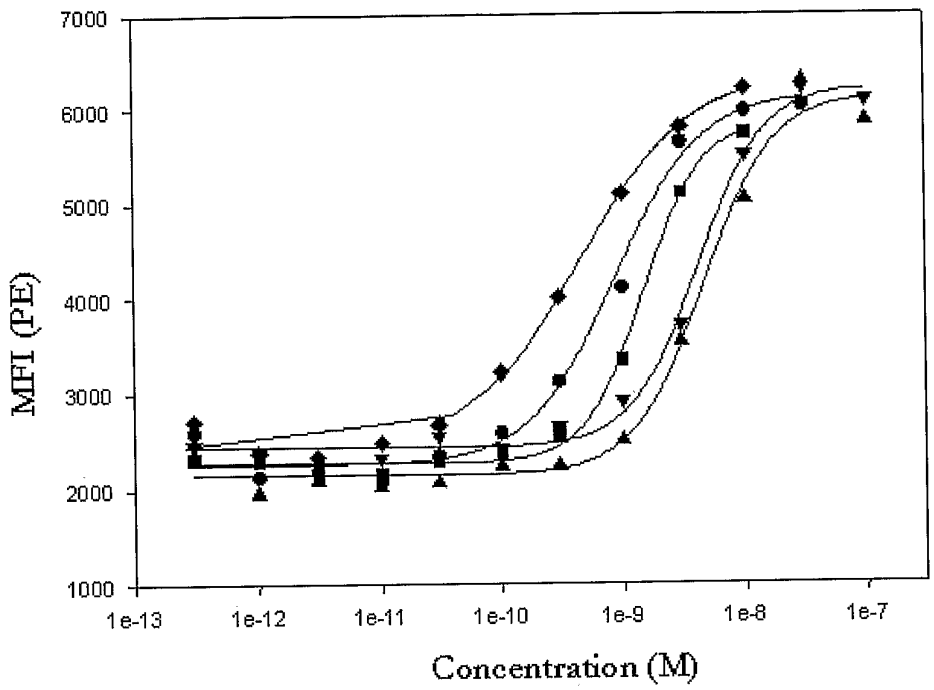


Figure 9



● (His)F92pAF, EC50 = 0.9 nM

■ (His)F92pAF-5K, EC50 = 1.5 nM

▲ (His)F92pAF-20K, EC50 = 4.6 nM

▼ (His)F92-pAF-30K, EC50 = 4.1 nM

◆ (His)hGH, EC50 = 0.5 nM

Figure 10, Panel A:

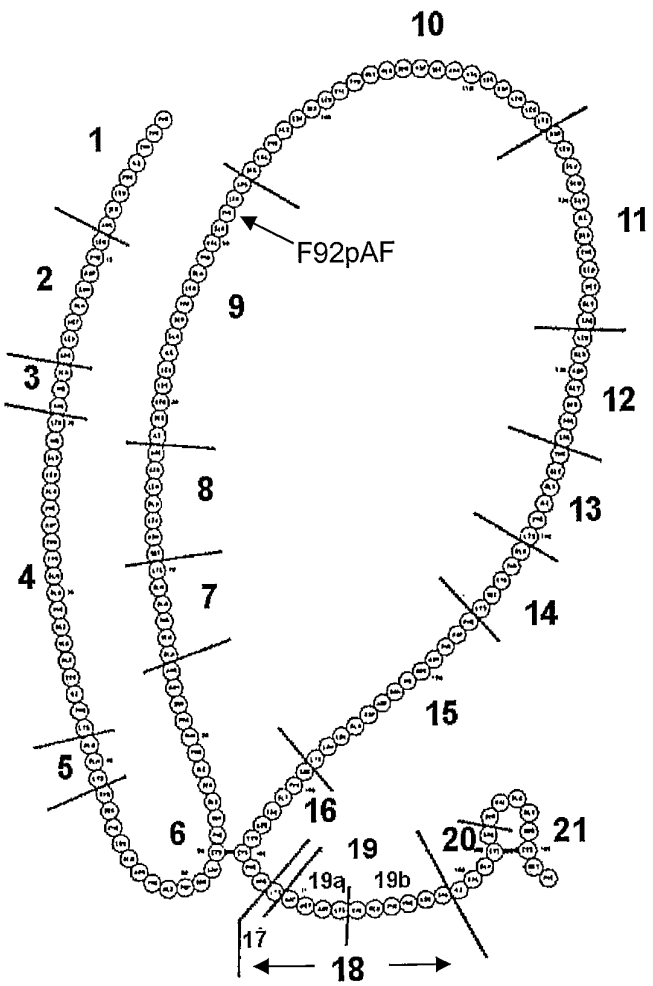
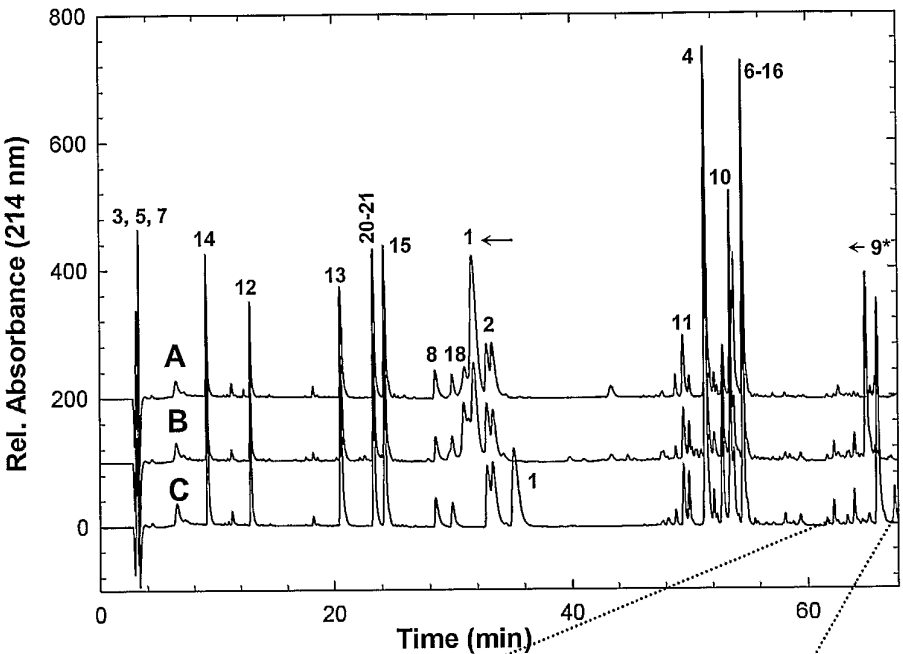


Figure 10, cont.

Panel B:



Panel C:

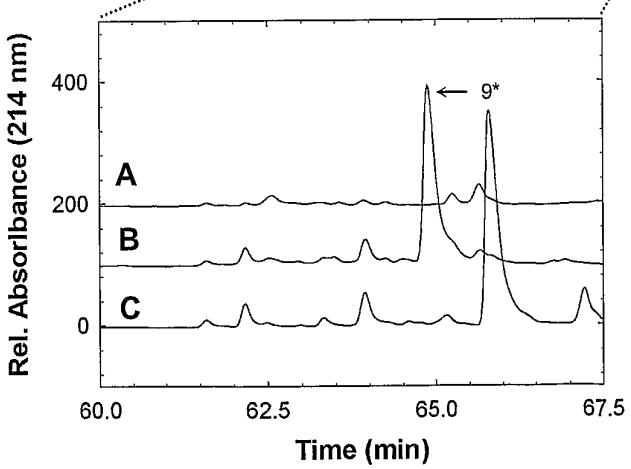
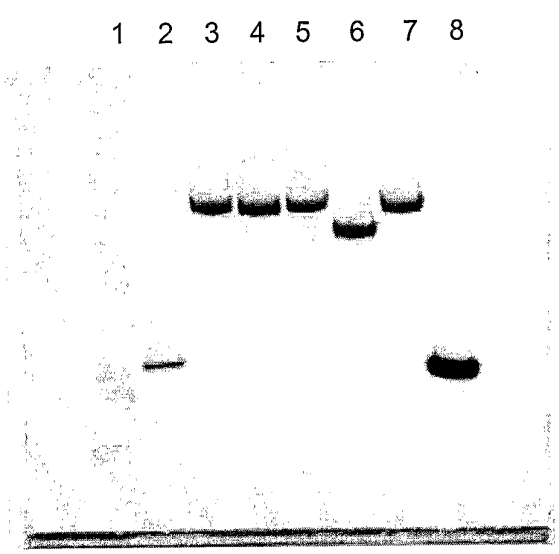


Figure 11

Panel A:



Panel B:

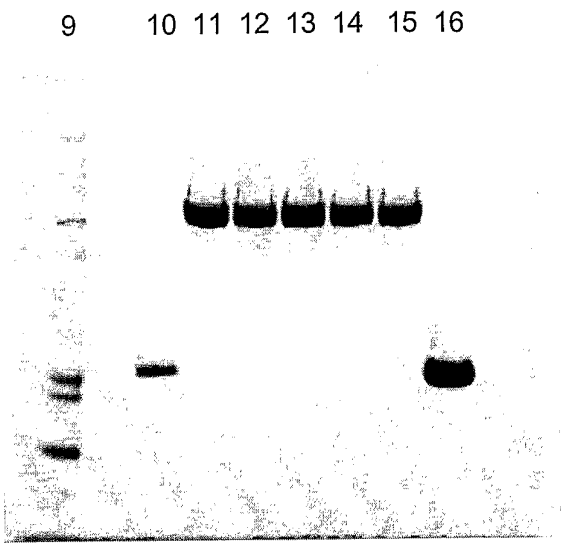


Figure 12

(His)F92pAF

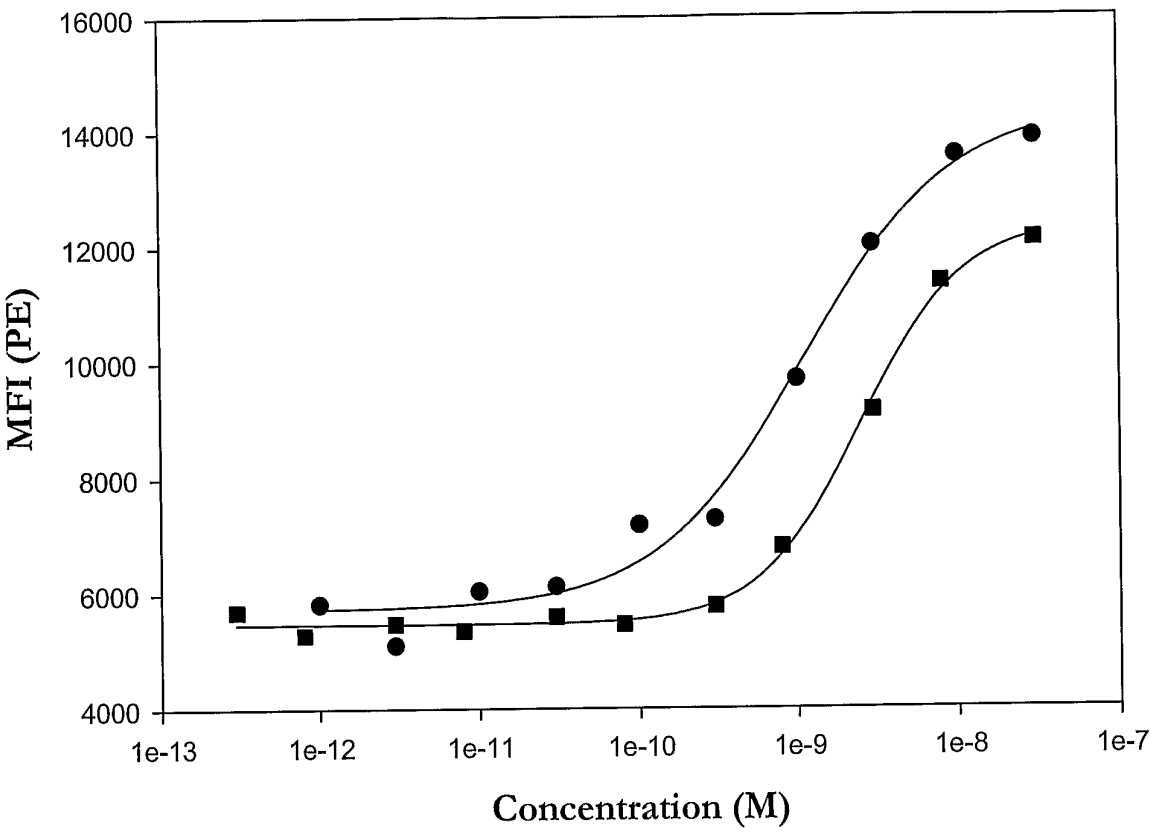


Figure 13, Panel A:

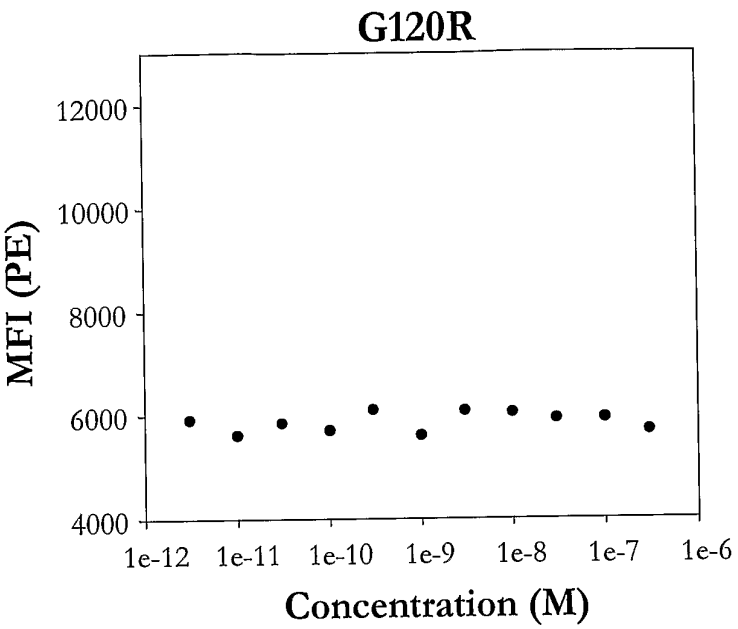


Figure 13, Panel B:

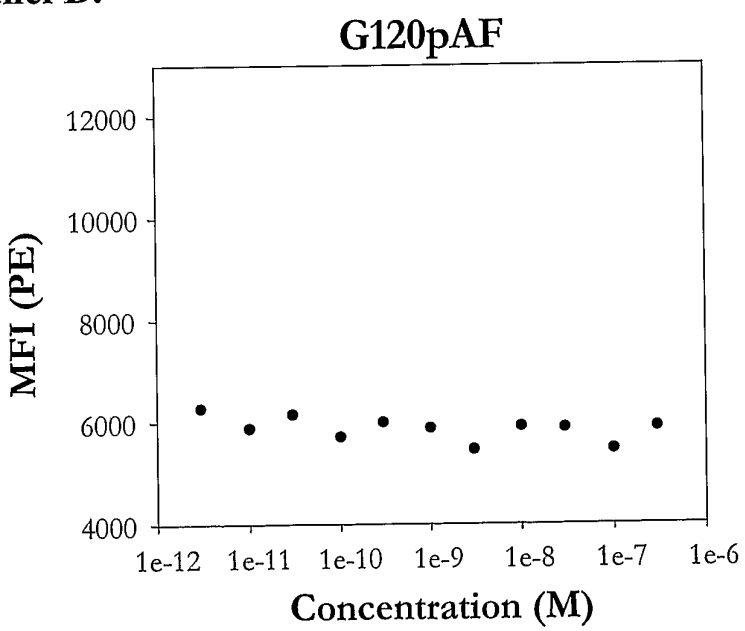


Figure 14

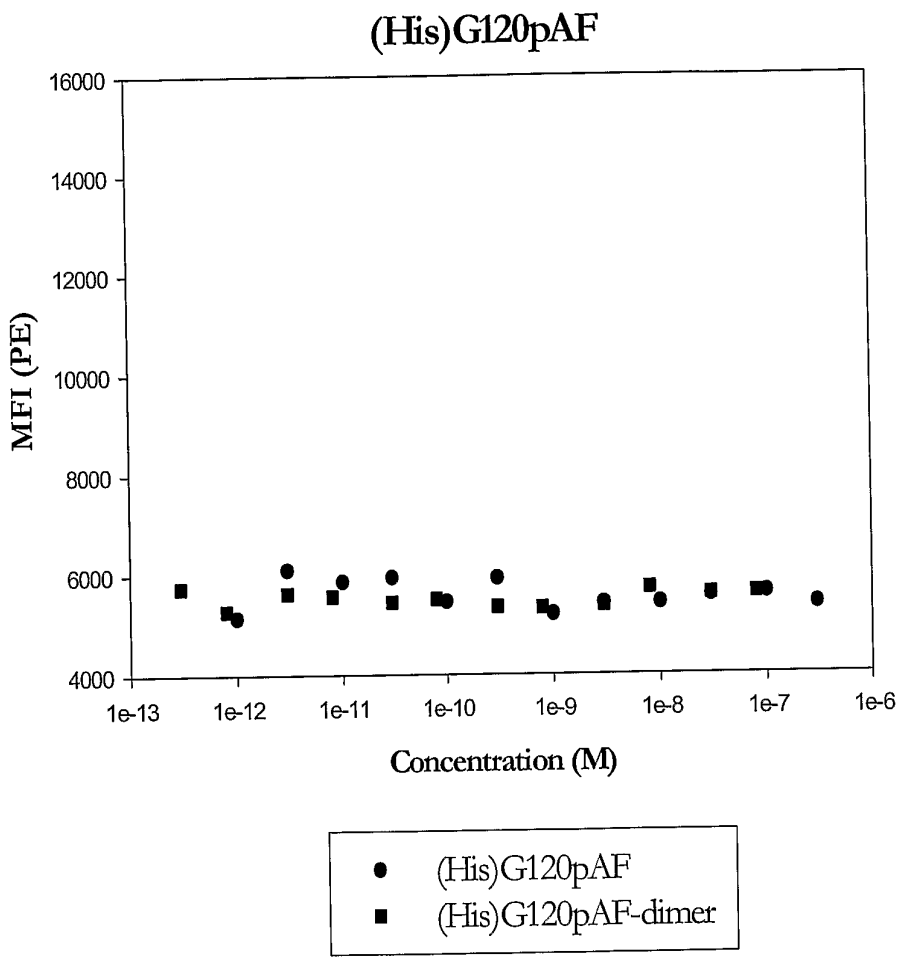

(His)G120pAF
16000
14000
12000
10000
8000
6000
4000
MFI (PE)
1e-13
1e-12
1e-11
1e-10
1e-9
1e-8
1e-7
1e-6
Concentration (M)
(His)G120pAF
(His)G120pAF-dimer

Figure 15

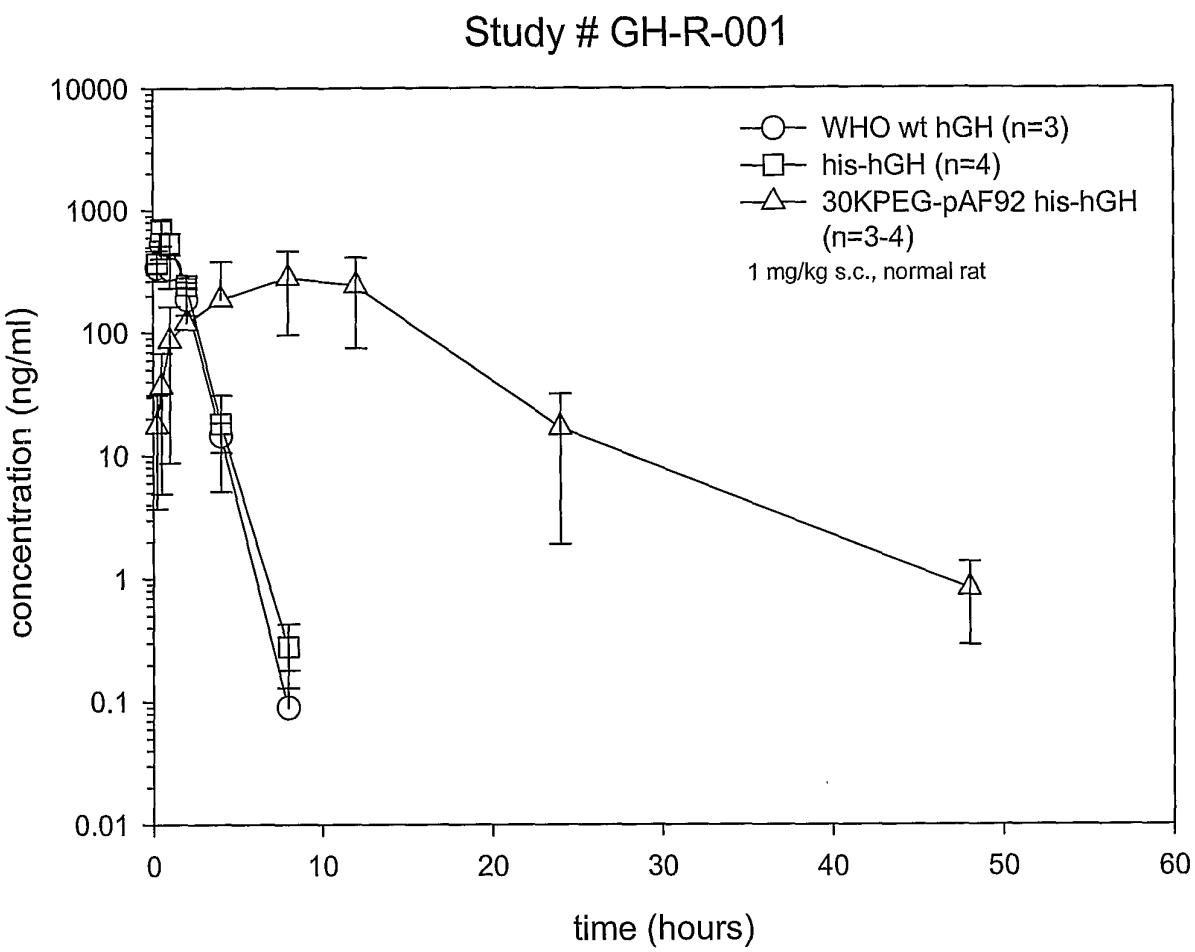

Study # GH-R-001
WHO wt hGH (n=3)
his-hGH (n=4)
30KPEG-pAF92 his-hGH (n=3-4)
1 mg/kg s.c., normal rat
concentration (ng/ml)
time (hours)
10000
1000
100
10
1
0.1
0.01
0
10
20
30
40
50
60

Figure 16

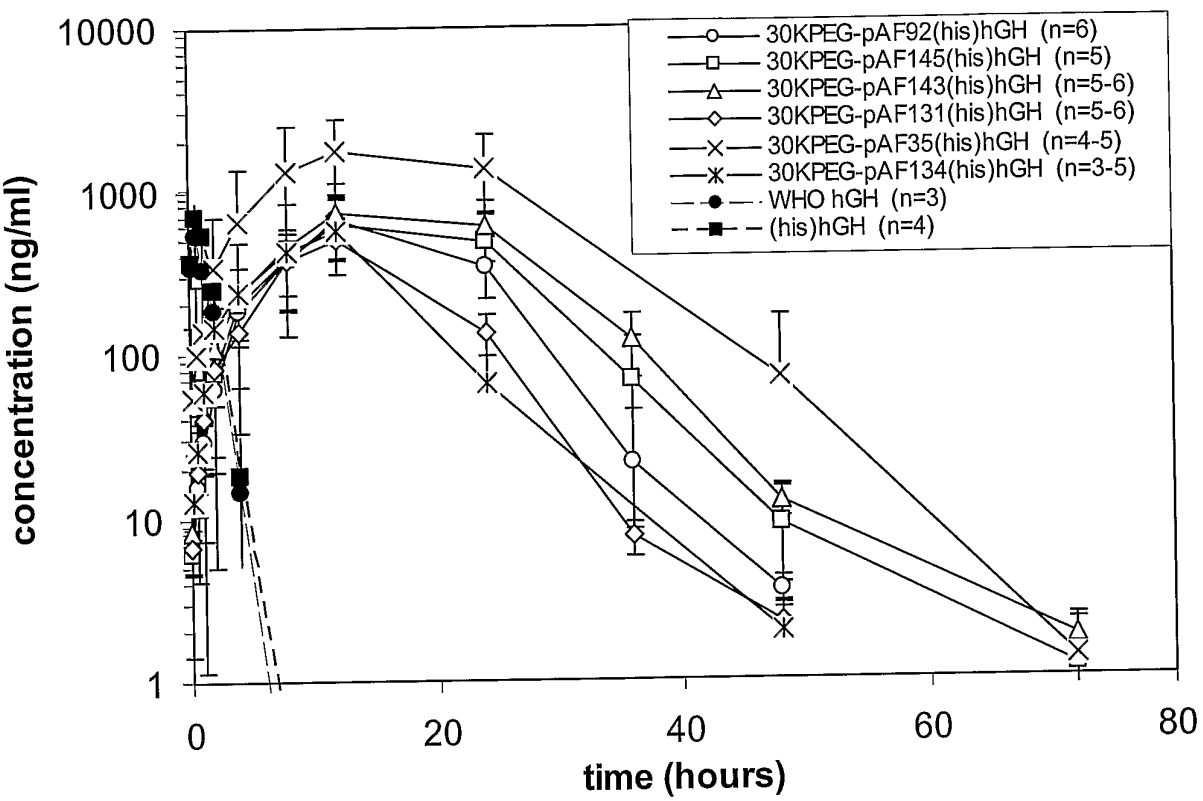

10000
1000
100
10
1
concentration (ng/ml)
0
20
40
60
80
time (hours)
30KPEG-pAF92(his)hGH (n=6)
30KPEG-pAF145(his)hGH (n=5)
30KPEG-pAF143(his)hGH (n=5-6)
30KPEG-pAF131(his)hGH (n=5-6)
30KPEG-pAF35(his)hGH (n=4-5)
30KPEG-pAF134(his)hGH (n=3-5)
WHO hGH (n=3)
(his)hGH (n=4)

Figure 17

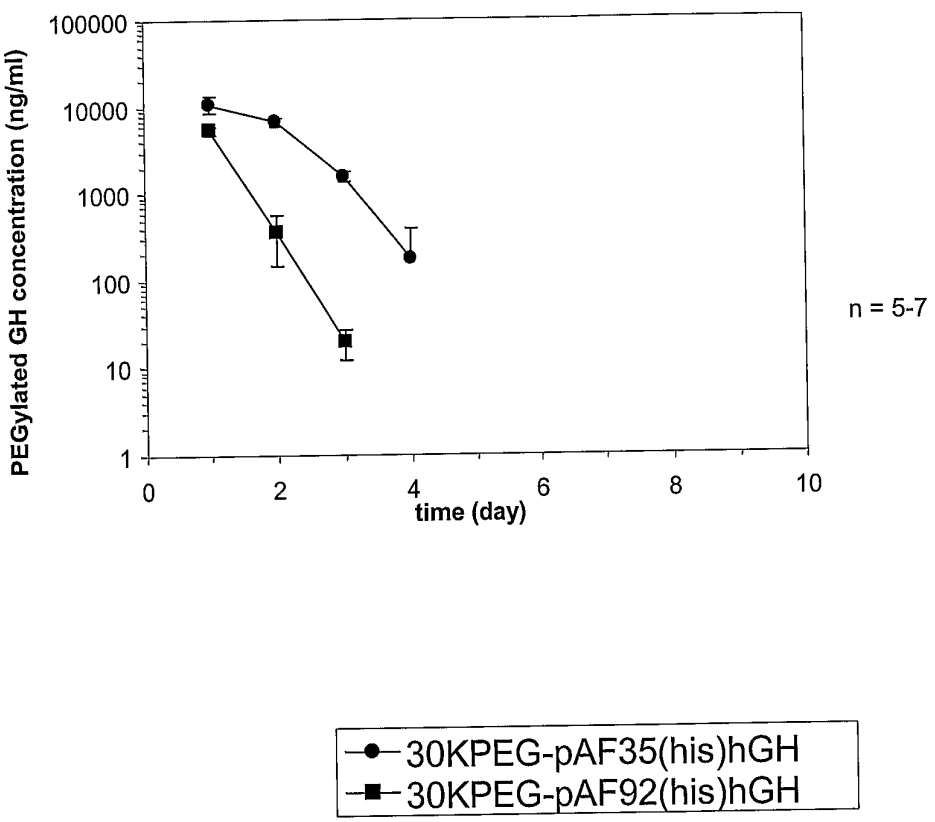

PEGylated GH concentration (ng/ml)
100000
10000
1000
100
10
1
0
2
4
6
8
10
time (day)
n = 5-7
30KPEG-pAF35(his)hGH
30KPEG-pAF92(his)hGH

Figure 18, Panel A

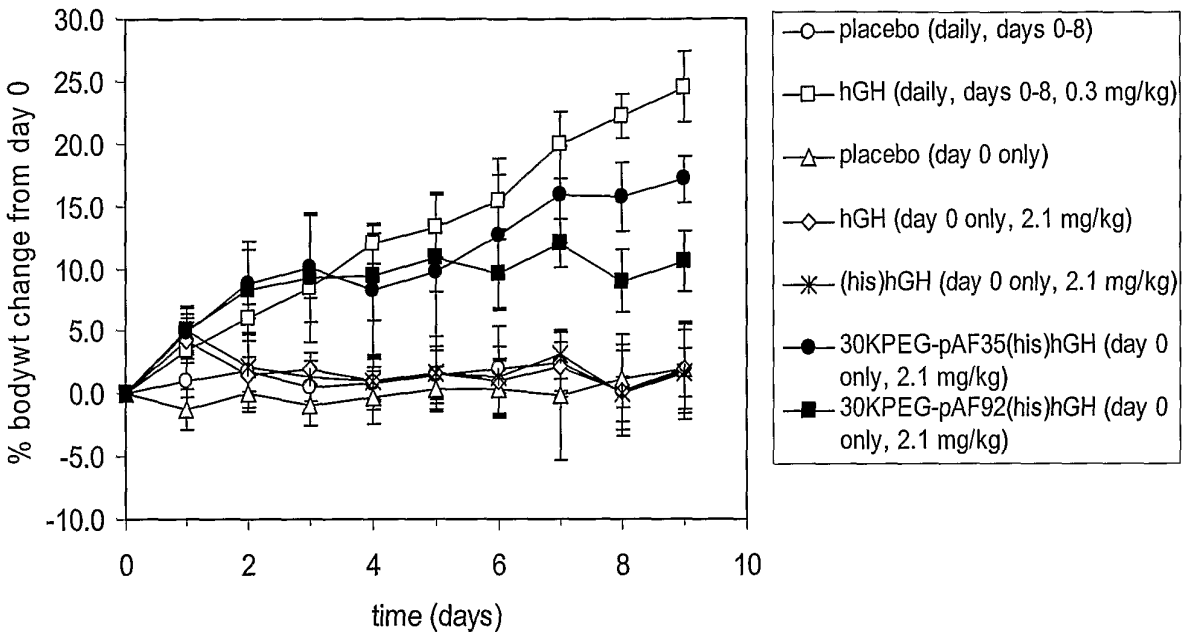


Figure 18, Panel B

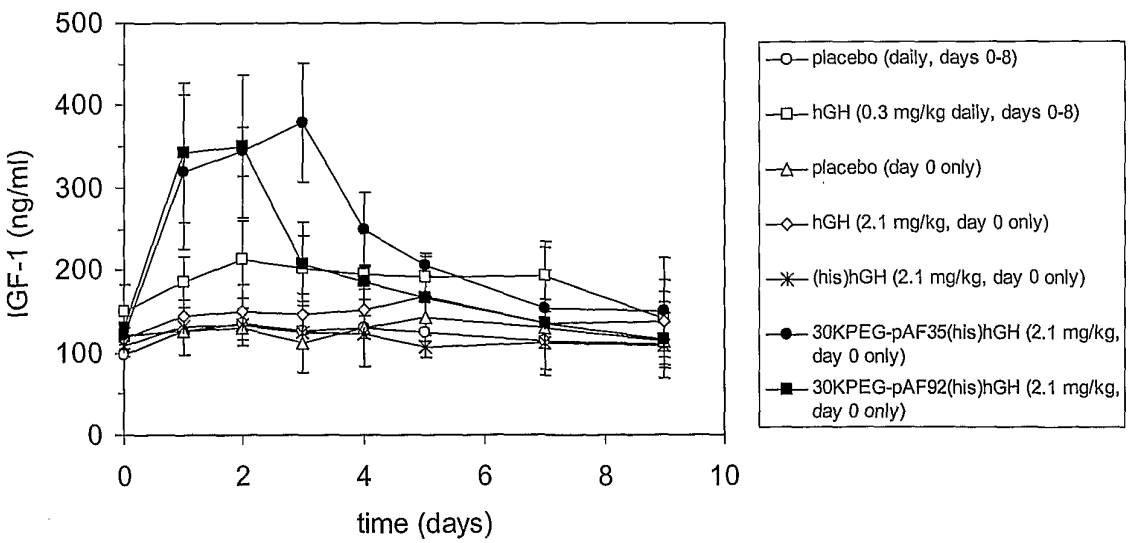


Figure 18, Panel C

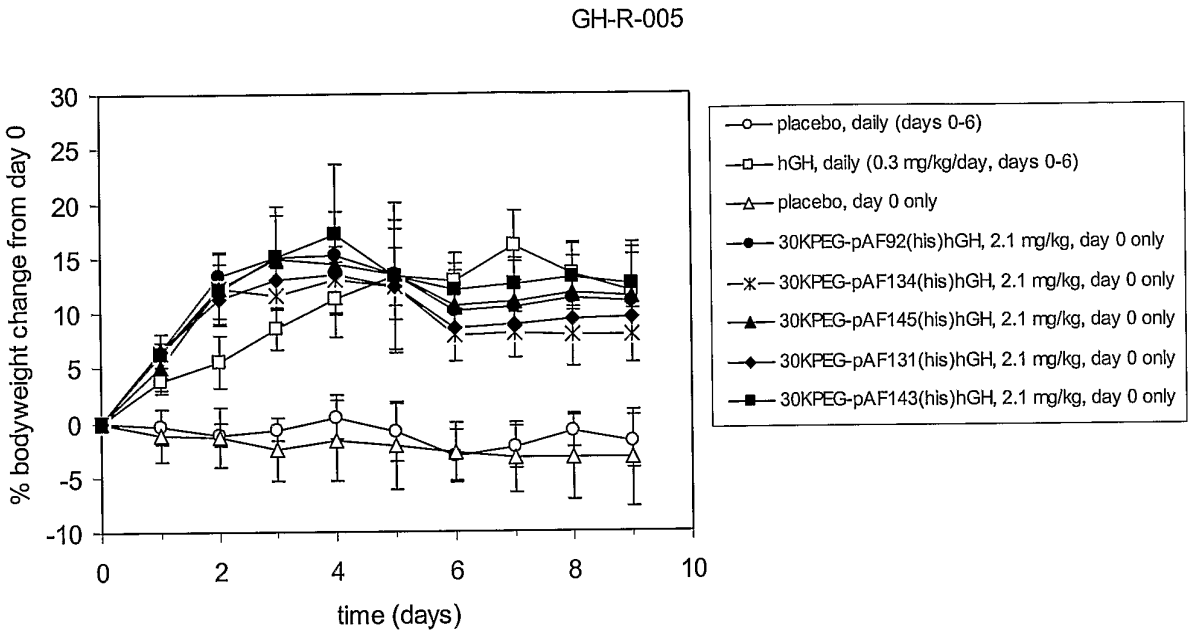


Figure 18, Panel D

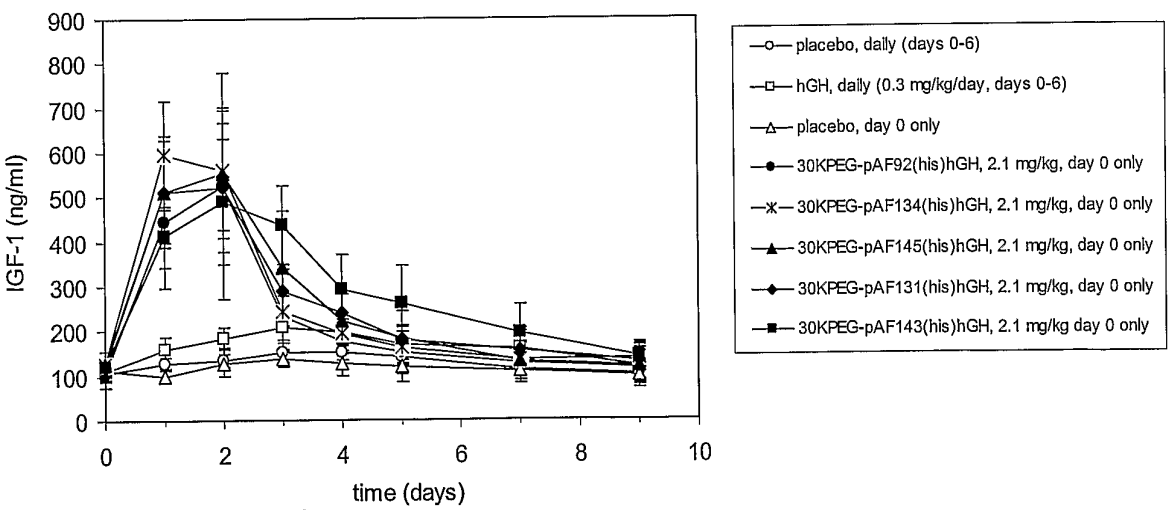


Figure 18, Panel E

