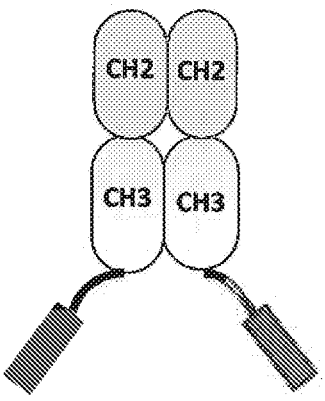
FIG. 1A

SEQ ID NO: 2

DKTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVD
VSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLH
QDWLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSR
DELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDS
DGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSP
GK*GGGGSGGGGSGGGGS*QRPRLSHKGPMPF

FIG. 1B



Secreted Fc-Apelin Dimer

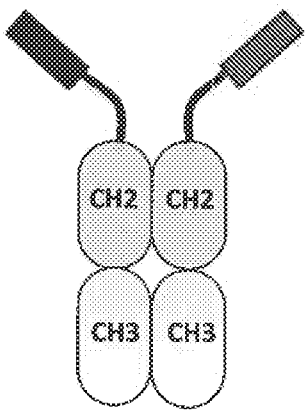
N′-Fc-[linker]-Apelin-C′

FIG. 2A

SEQ ID NO: 4

QRPRLSHKGPMPF*GGGGSGGGGSGGGGS*DKTHTCPPCPAPELLGGP
SVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEV
HNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPA
PIEKTISKAKGQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSD
IAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNV
FSCSVMHEALHNHYTQKSLSLSPGK

FIG. 2B



Secreted Apelin-Fc Dimer

N′-Apelin-[linker]-Fc-C′

FIG. 3A

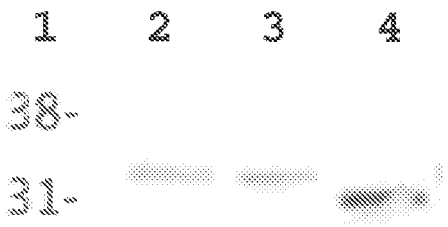

1
2
3
4
38-
31-

FIG. 3B

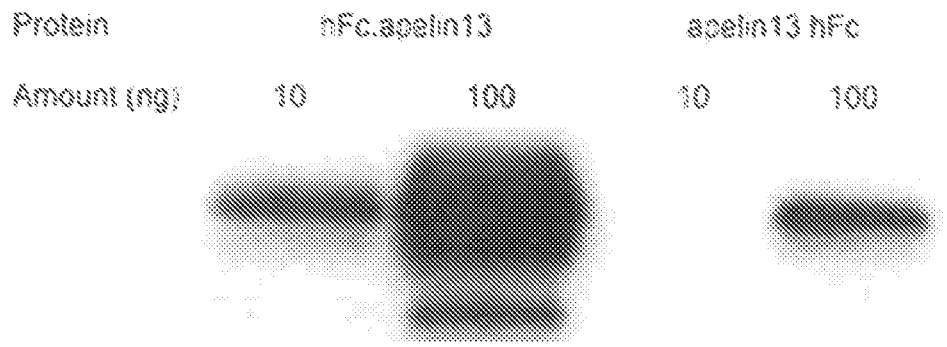
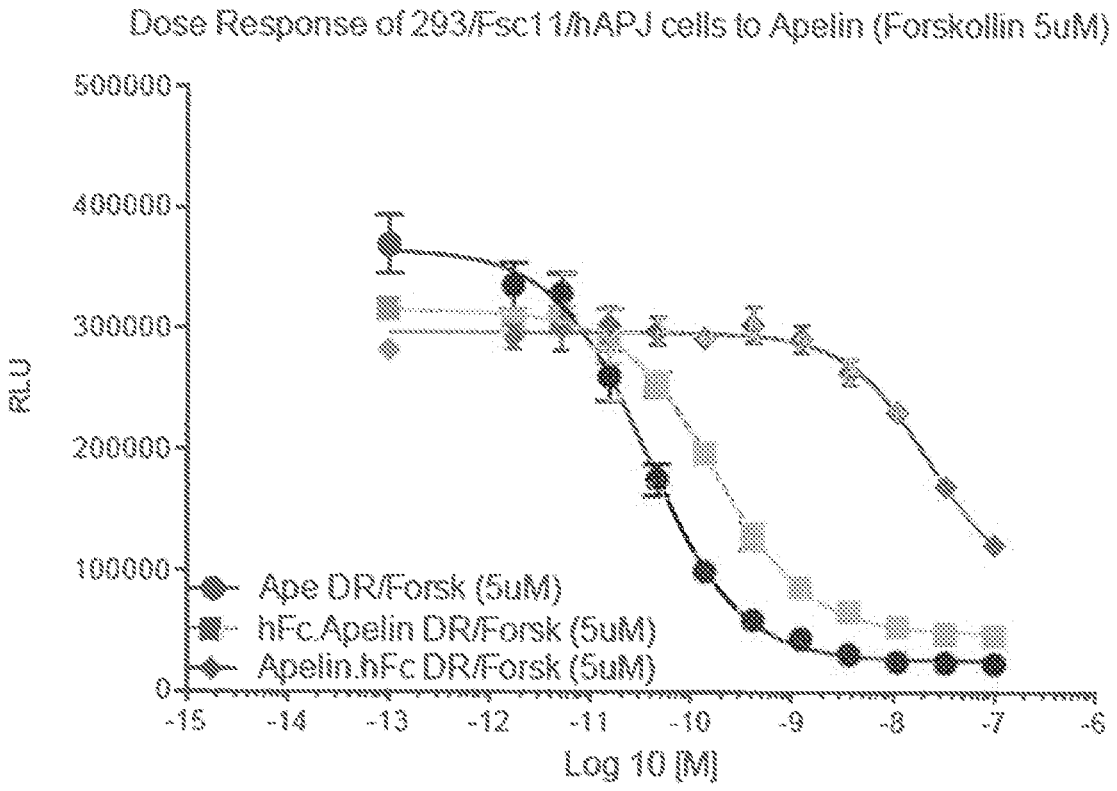
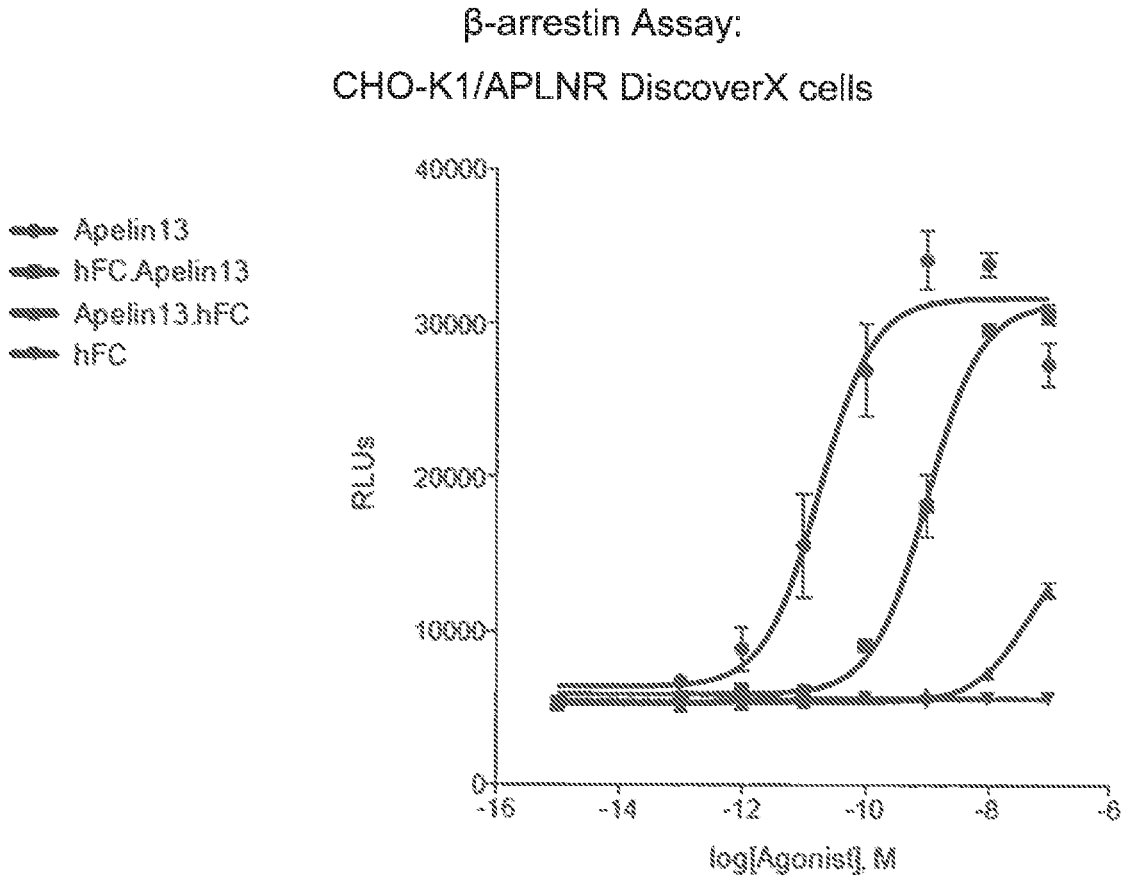

Protein
nFc.apelin13
apelin13 nFc
Amount (ng)
10
100
10
100

FIG. 4



Treatment	EC_{50}
Apelin13 DR/Forskolin (5μM)	36.5 pM
hFc.Apelin13 DR/Forskolin (5μM)	174 pM
Apelin13.hFc DR/Forskolin (5μM)	22.1 nM

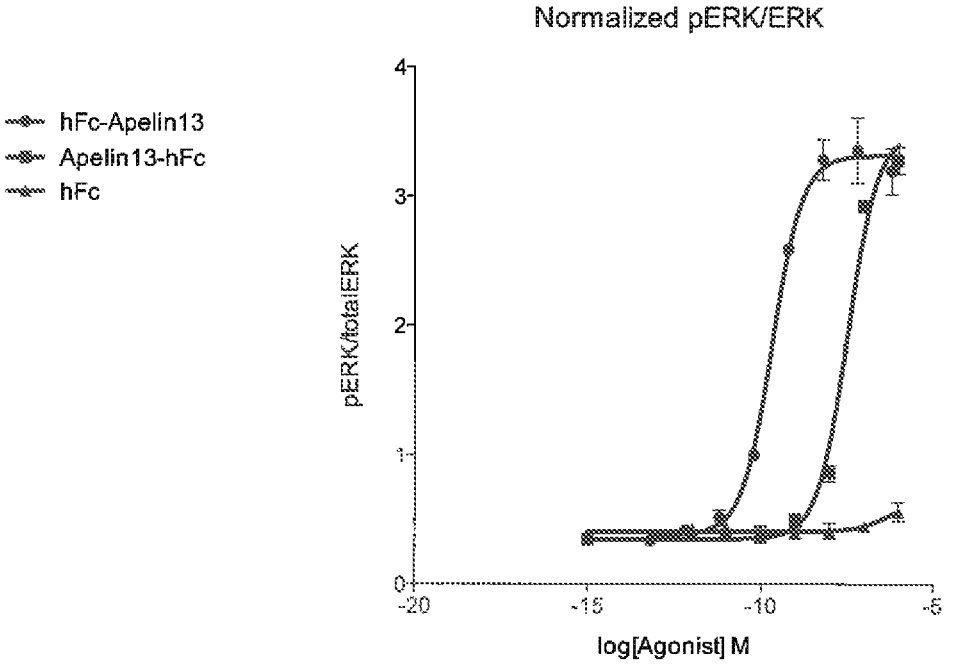
FIG. 5



Treatment	EC_{50}
Apelin13	17.6 pM
hFc.Apelin13	992 pM
Apelin13.hFc	44.2 nM

FIG. 6

pERK Assay: CHO/hAPLNR



Treatment	EC_{50}
hFc-Apelin13	216pM
Apelin13-hFc	33nM

FIG. 7A

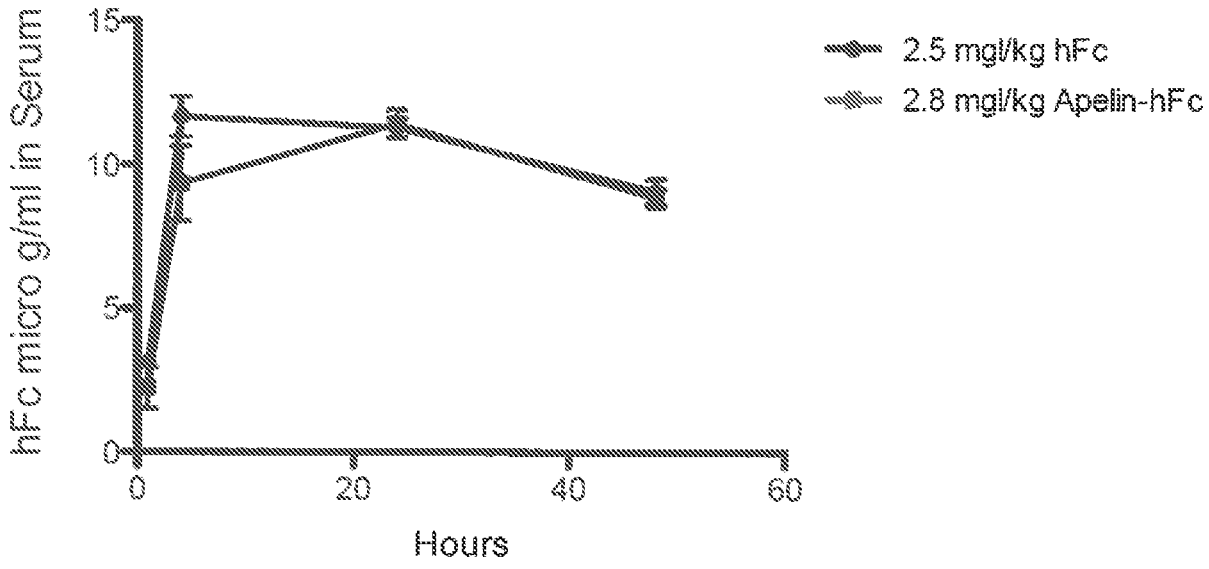
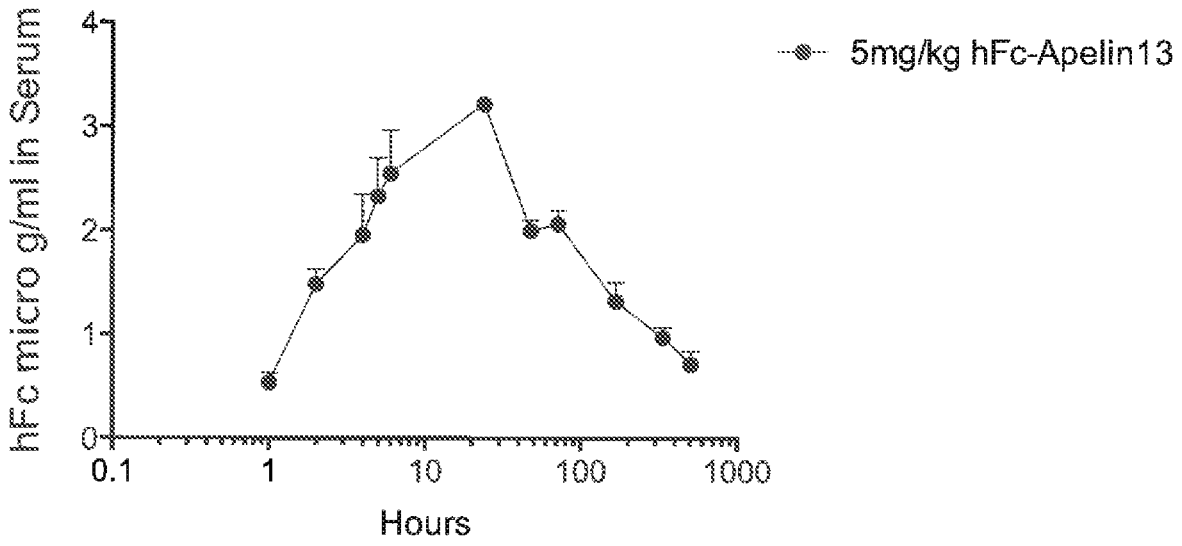

hFc micro g/ml in Serum
15
10
5
0
0
20
40
60
Hours
2.5 mgl/kg hFc
2.8 mgl/kg Apelin-hFc

FIG. 7B


hFc micro g/ml in Serum
4
3
2
1
0
0.1
1
10
100
1000
Hours
5mg/kg hFc-Apelin13