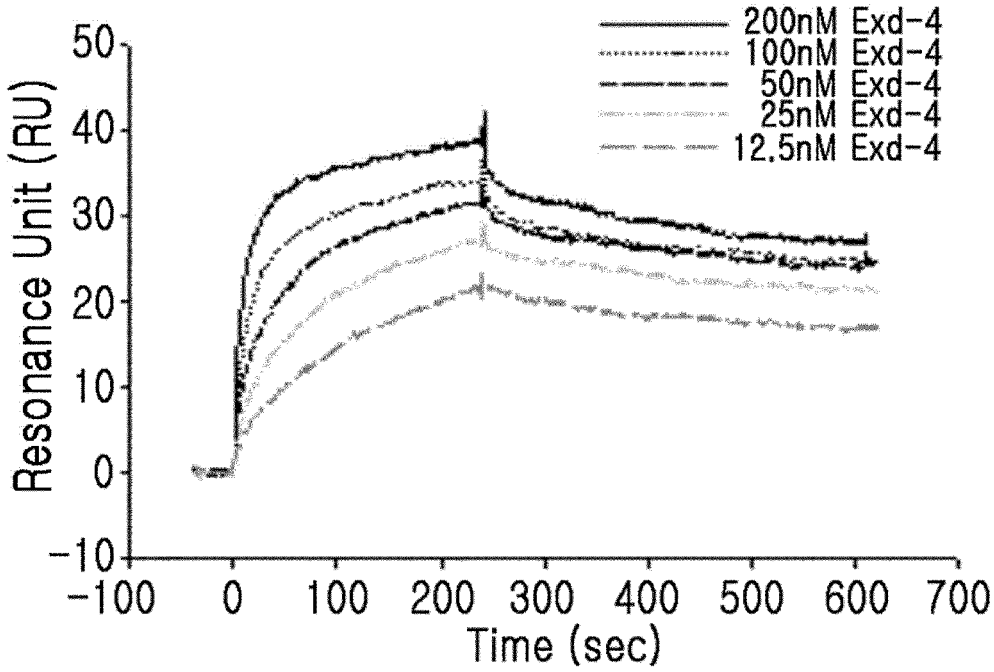
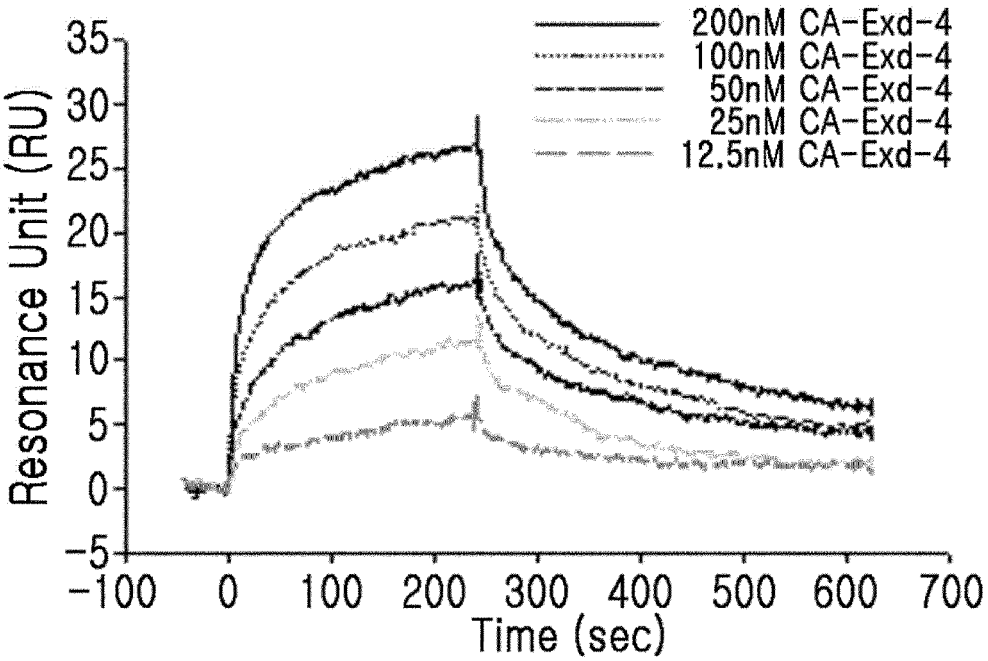
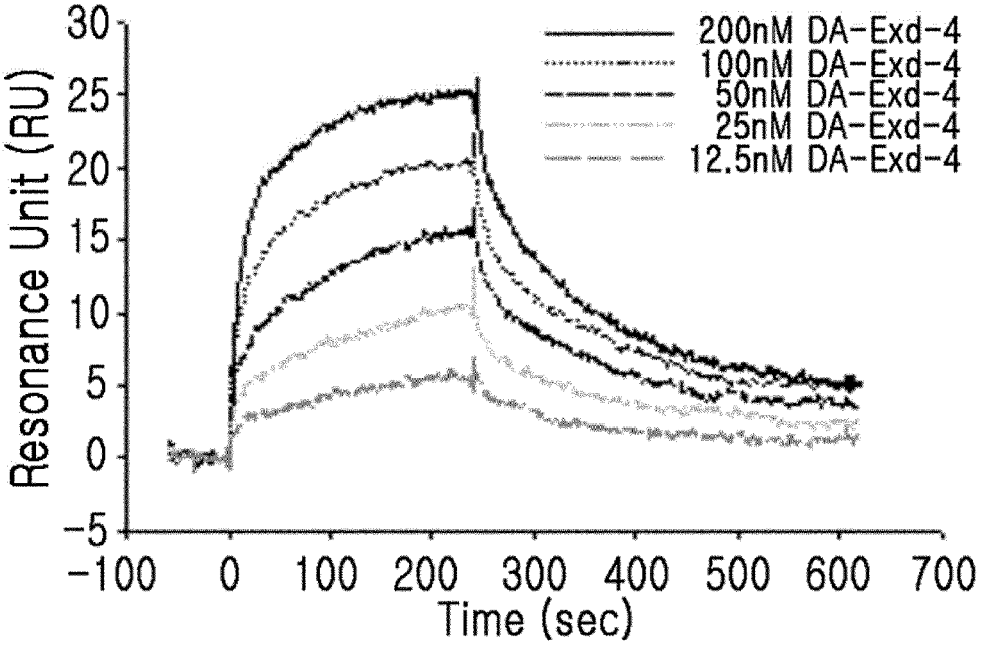
[Fig. 1a]


200nM Exd-4
100nM Exd-4
50nM Exd-4
25nM Exd-4
12.5nM Exd-4
Resonance Unit (RU)
50
40
30
20
10
0
-10
-100
0
100
200
300
400
500
600
700
Time (sec)

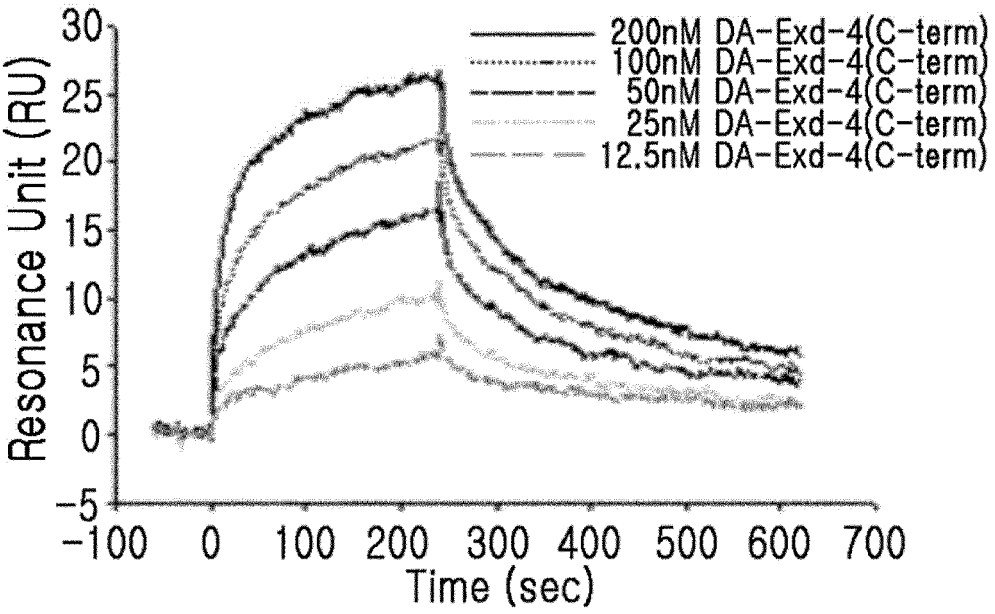
[Fig. 1b]


200nM CA-Exd-4
100nM CA-Exd-4
50nM CA-Exd-4
25nM CA-Exd-4
12.5nM CA-Exd-4
Resonance Unit (RU)
35
30
25
20
15
10
5
0
-5
-100
0
100
200
300
400
500
600
700
Time (sec)

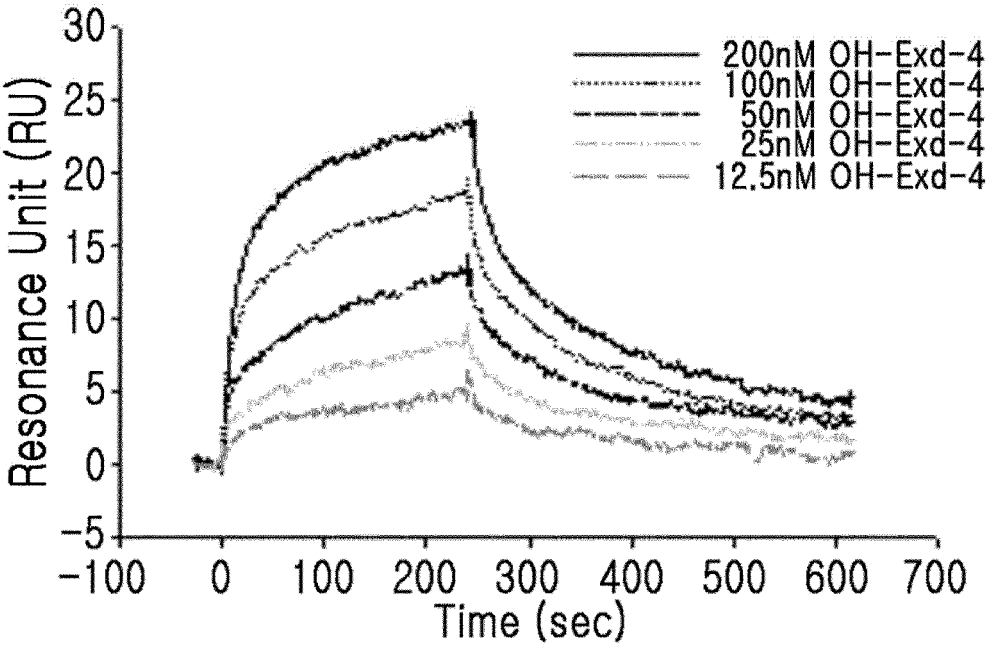
[Fig. 1c]


200nM DA-Exd-4
100nM DA-Exd-4
50nM DA-Exd-4
25nM DA-Exd-4
12.5nM DA-Exd-4
Resonance Unit (RU)
30
25
20
15
10
5
0
-5
-100
0
100
200
300
400
500
600
700
Time (sec)

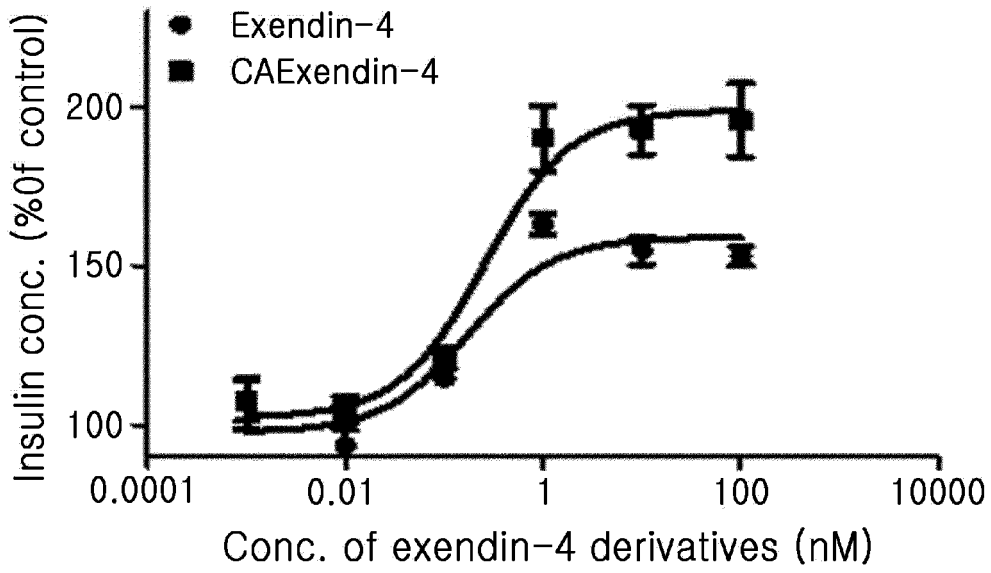
[Fig. 1d]


200nM DA-Exd-4(C-term)
100nM DA-Exd-4(C-term)
50nM DA-Exd-4(C-term)
25nM DA-Exd-4(C-term)
12.5nM DA-Exd-4(C-term)
Resonance Unit (RU)
30
25
20
15
10
5
0
-5
-100
0
100
200
300
400
500
600
700
Time (sec)

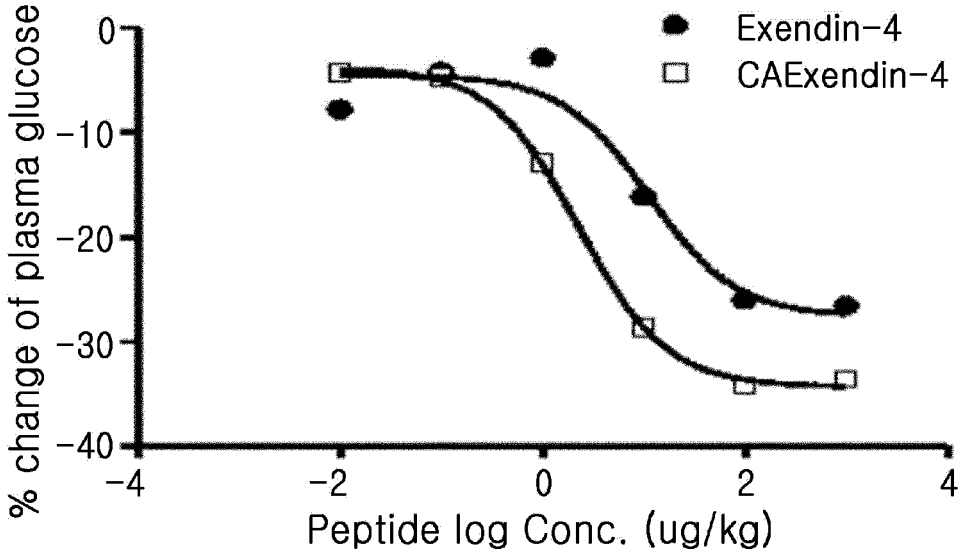
[Fig. 1e]


Resonance Unit (RU)
30
25
20
15
10
5
0
-5
-100
0
100
200
300
400
500
600
700
Time (sec)
200nM OH-Exd-4
100nM OH-Exd-4
50nM OH-Exd-4
25nM OH-Exd-4
12.5nM OH-Exd-4

[Fig. 2]


Insulin conc. (%0f control)
200
150
100
0.0001
0.01
1
100
10000
Conc. of exendin-4 derivatives (nM)
Exendin-4
CAExendin-4

[Fig. 3]


Exendin-4
CAExendin-4
% change of plasma glucose
0
-10
-20
-30
-40
-4
-2
0
2
4
Peptide log Conc. (ug/kg)

* : $p < 0.05$