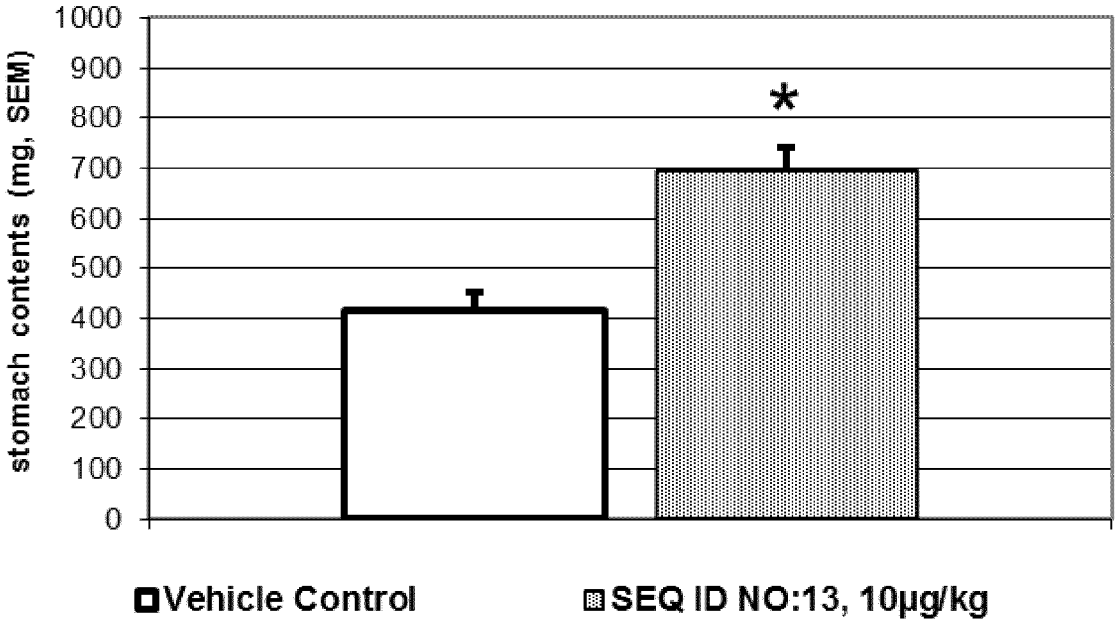
Fig. 1

a)


stomach contents (mg, SEM)
1000
900
800
700
600
500
400
300
200
100
0
*
Vehicle Control
SEQ ID NO:13, 10µg/kg

b)

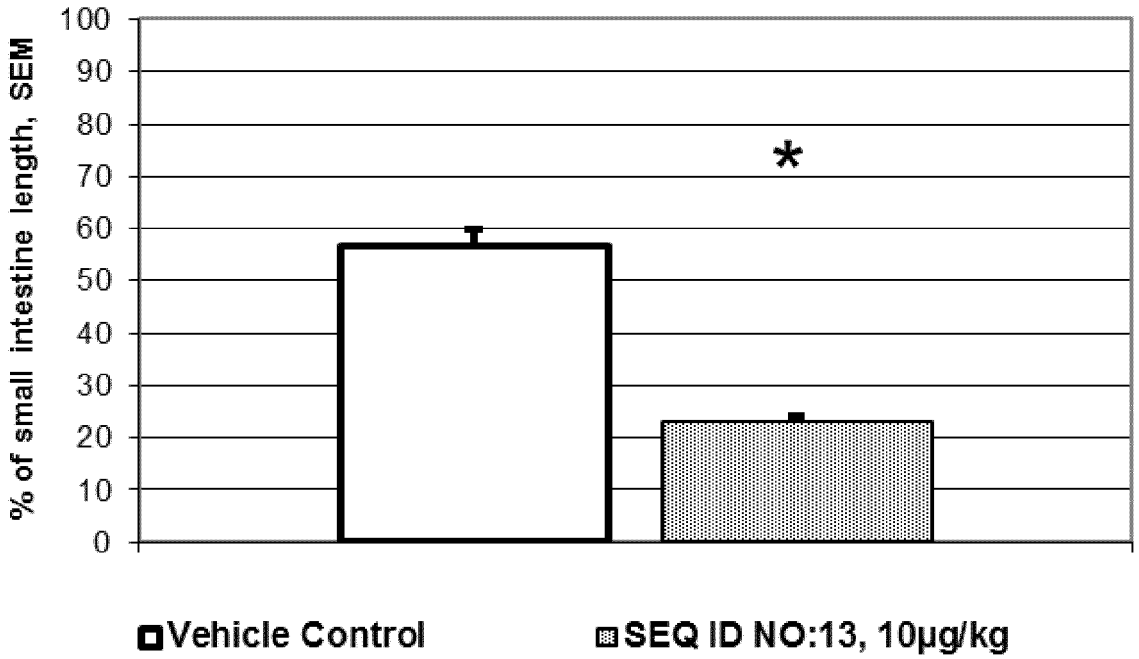
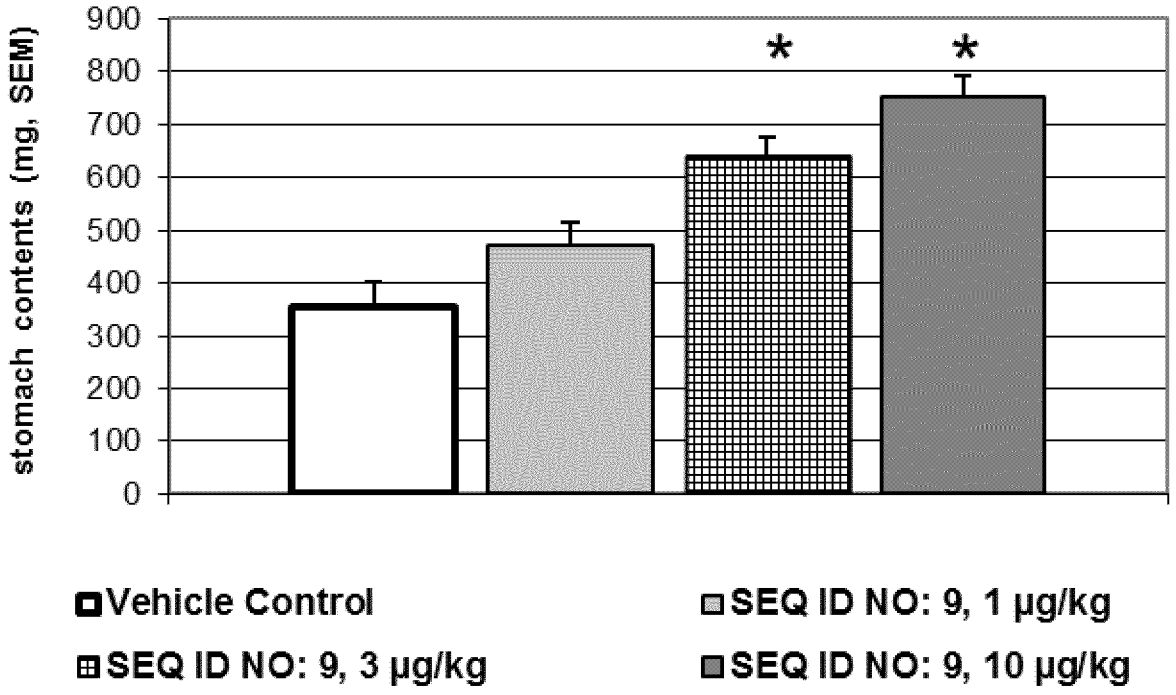

% of small intestine length, SEM
100
90
80
70
60
50
40
30
20
10
0
*
Vehicle Control
SEQ ID NO:13, 10µg/kg

Fig. 2

a)


stomach contents (mg, SEM)
900
800
700
600
500
400
300
200
100
0
*
*
Vehicle Control
SEQ ID NO: 9, 1 µg/kg
SEQ ID NO: 9, 3 µg/kg
SEQ ID NO: 9, 10 µg/kg

b)

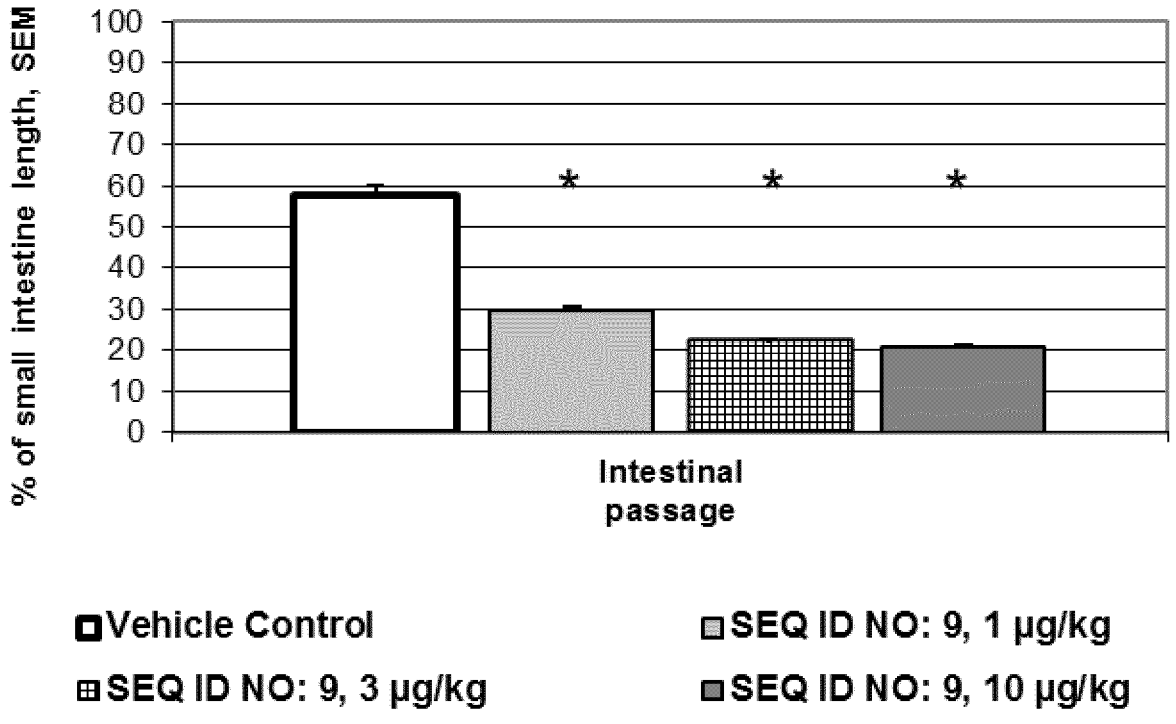

% of small intestine length, SEM
100
90
80
70
60
50
40
30
20
10
0
*
*
*
Intestinal passage
Vehicle Control
SEQ ID NO: 9, 1 µg/kg
SEQ ID NO: 9, 3 µg/kg
SEQ ID NO: 9, 10 µg/kg

Fig. 3:
a)

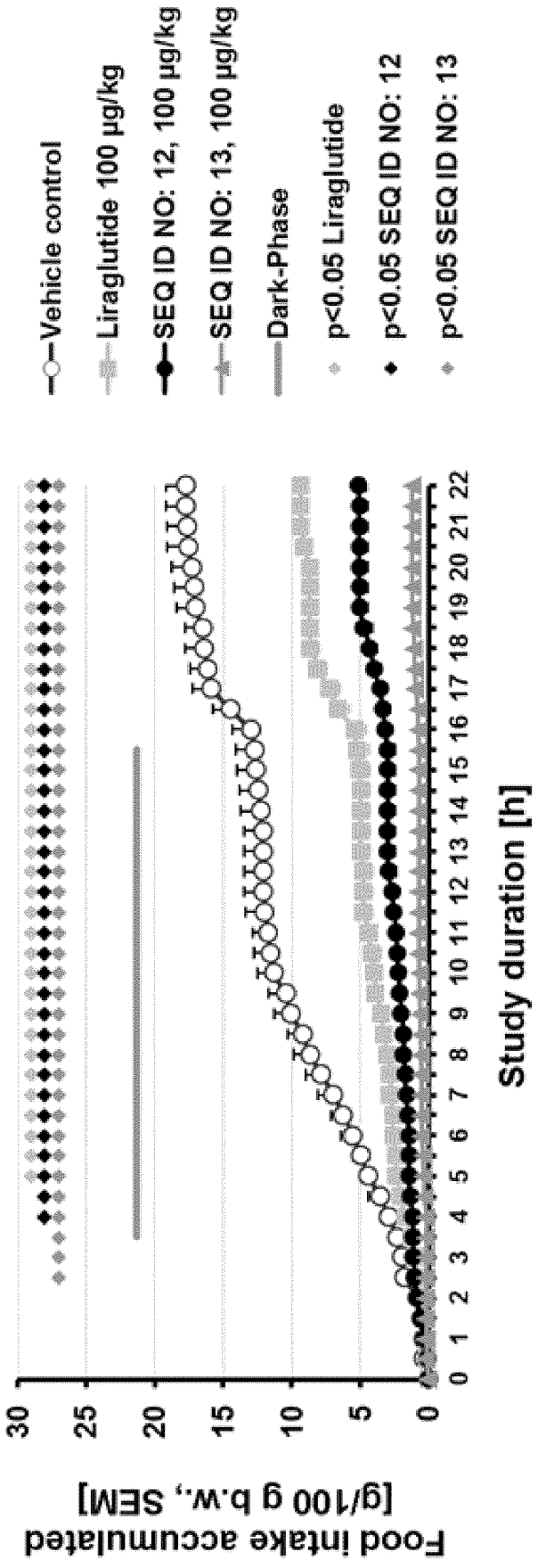
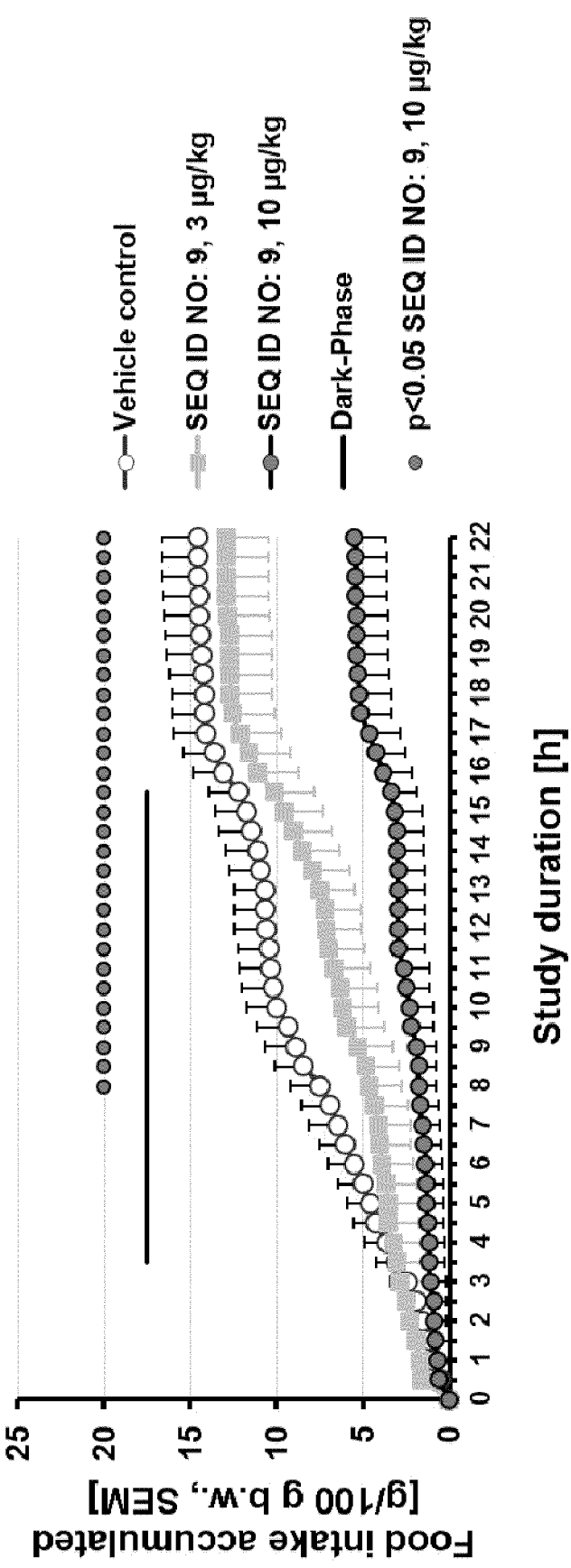

Food intake accumulated
[g/100 g b.w., SEM]
Study duration [h]
Vehicle control
Liraglutide 100 µg/kg
SEQ ID NO: 12, 100 µg/kg
SEQ ID NO: 13, 100 µg/kg
Dark-Phase
p<0.05 Liraglutide
p<0.05 SEQ ID NO: 12
p<0.05 SEQ ID NO: 13

Fig. 3:
b)


Food intake accumulated
[g/100 g b.w., SEM]
25
20
15
10
5
0
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22
Study duration [h]
Vehicle control
SEQ ID NO: 9, 3 µg/kg
SEQ ID NO: 9, 10 µg/kg
Dark-Phase
p<0.05 SEQ ID NO: 9, 10 µg/kg

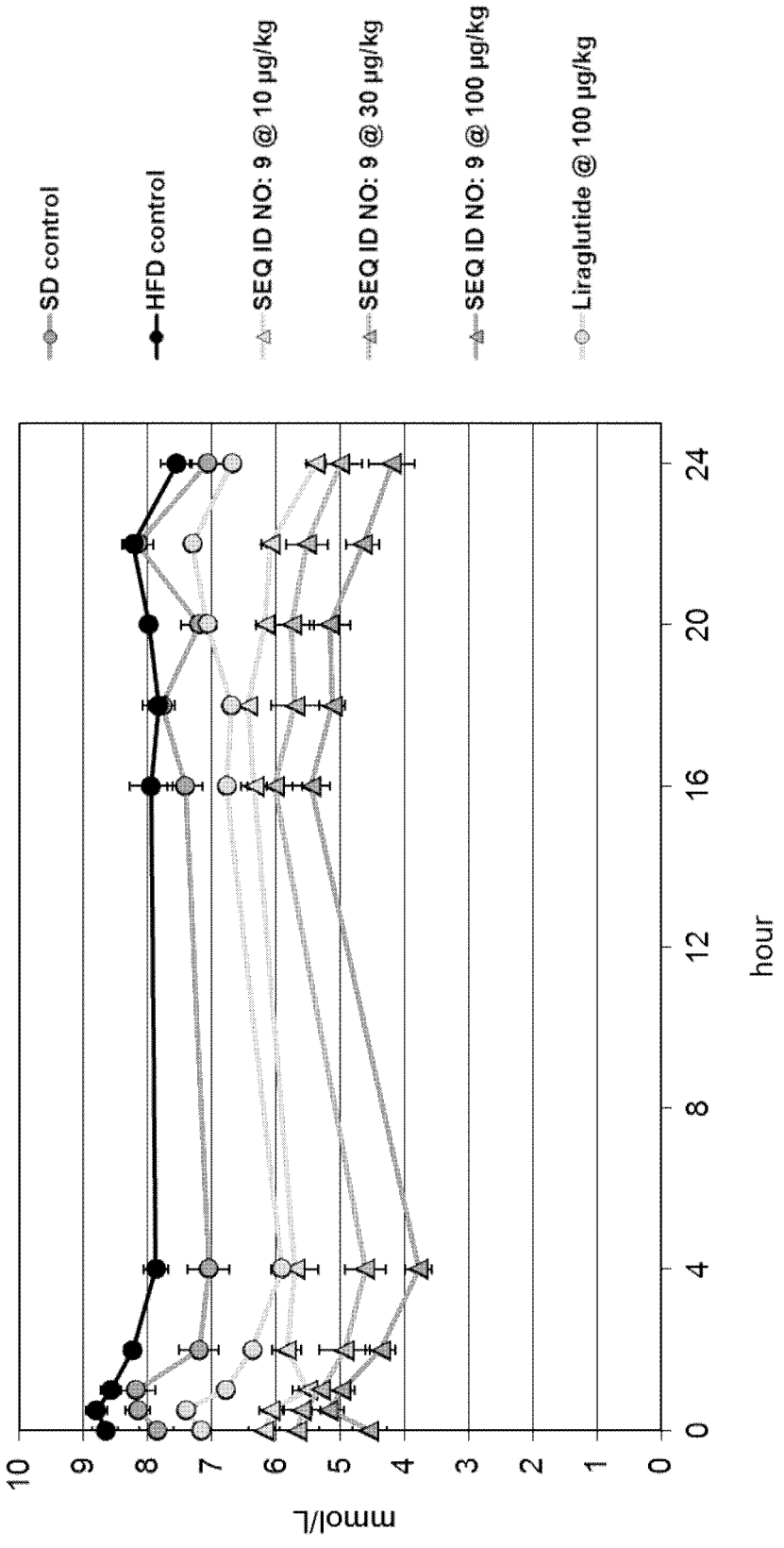

SD control
HFD control
SEQ ID NO: 9 @ 10 µg/kg
SEQ ID NO: 9 @ 30 µg/kg
SEQ ID NO: 9 @ 100 µg/kg
Liraglutide @ 100 µg/kg
mmol/L
10
9
8
7
6
5
4
3
2
1
0
0
4
8
12
16
20
24
hour

Fig. 4

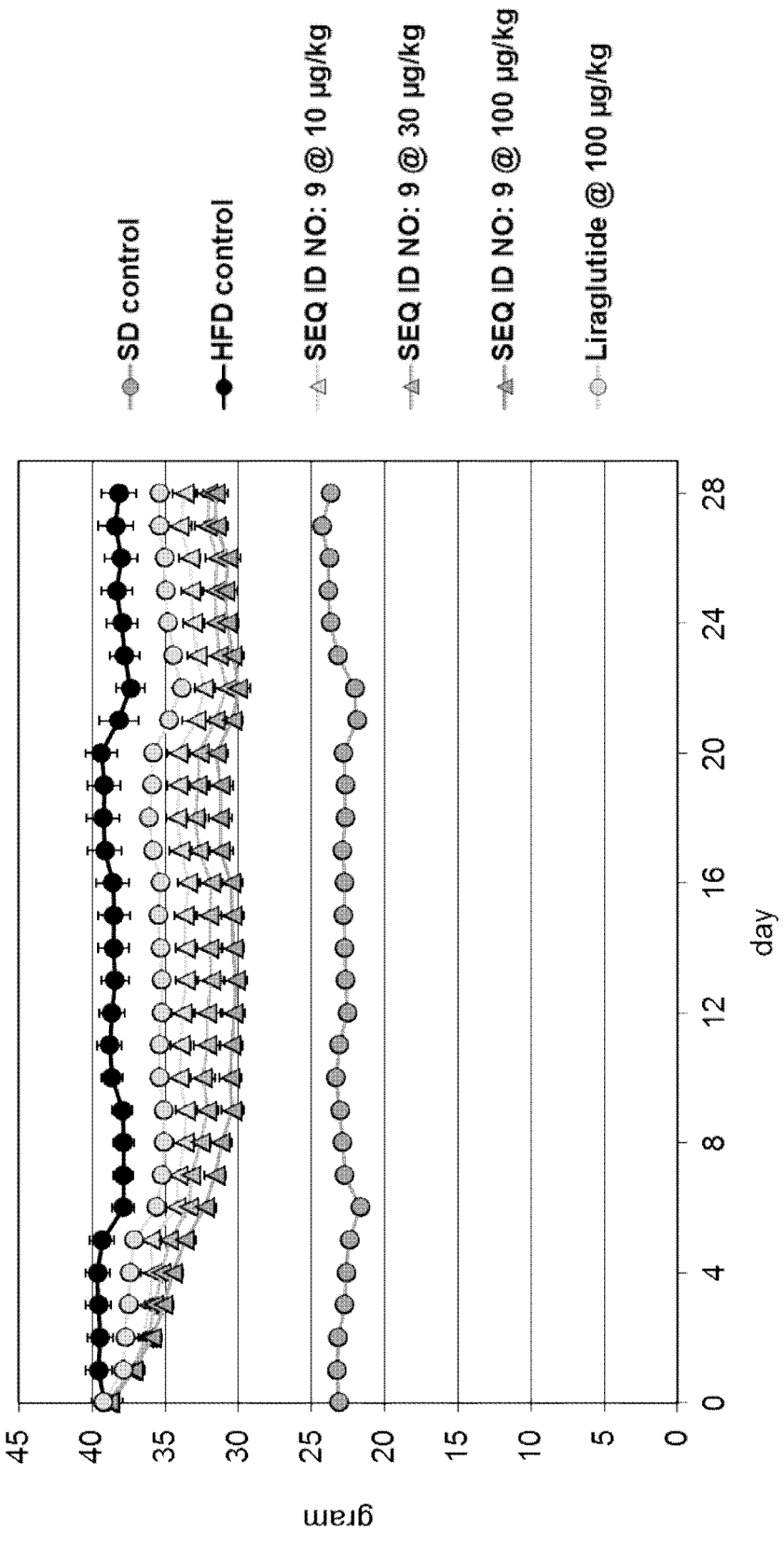
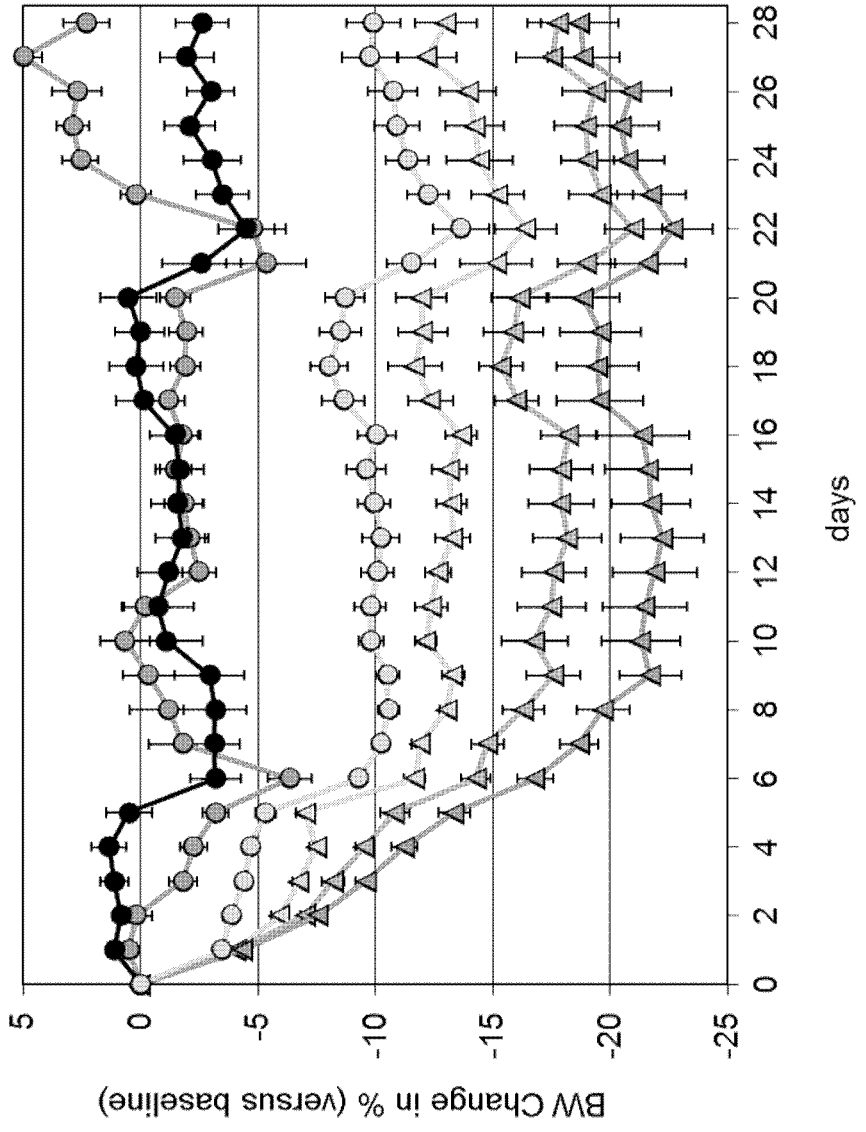

SD control
HFD control
SEQ ID NO: 9 @ 10 µg/kg
SEQ ID NO: 9 @ 30 µg/kg
SEQ ID NO: 9 @ 100 µg/kg
Liraglutide @ 100 µg/kg
gram
45
40
35
30
25
20
15
10
5
0
0
4
8
12
16
20
24
28
day

Fig. 5:

Fig. 6:


SD control
HFD control
SEQ ID NO: 9 @ 10 µg/kg
SEQ ID NO: 9 @ 30 µg/kg
SEQ ID NO: 9 @ 100 µg/kg
Liraglutide @ 100 µg/kg
BW Change in % (versus baseline)
5
0
-5
-10
-15
-20
-25
0
2
4
6
8
10
12
14
16
18
20
22
24
26
28
days

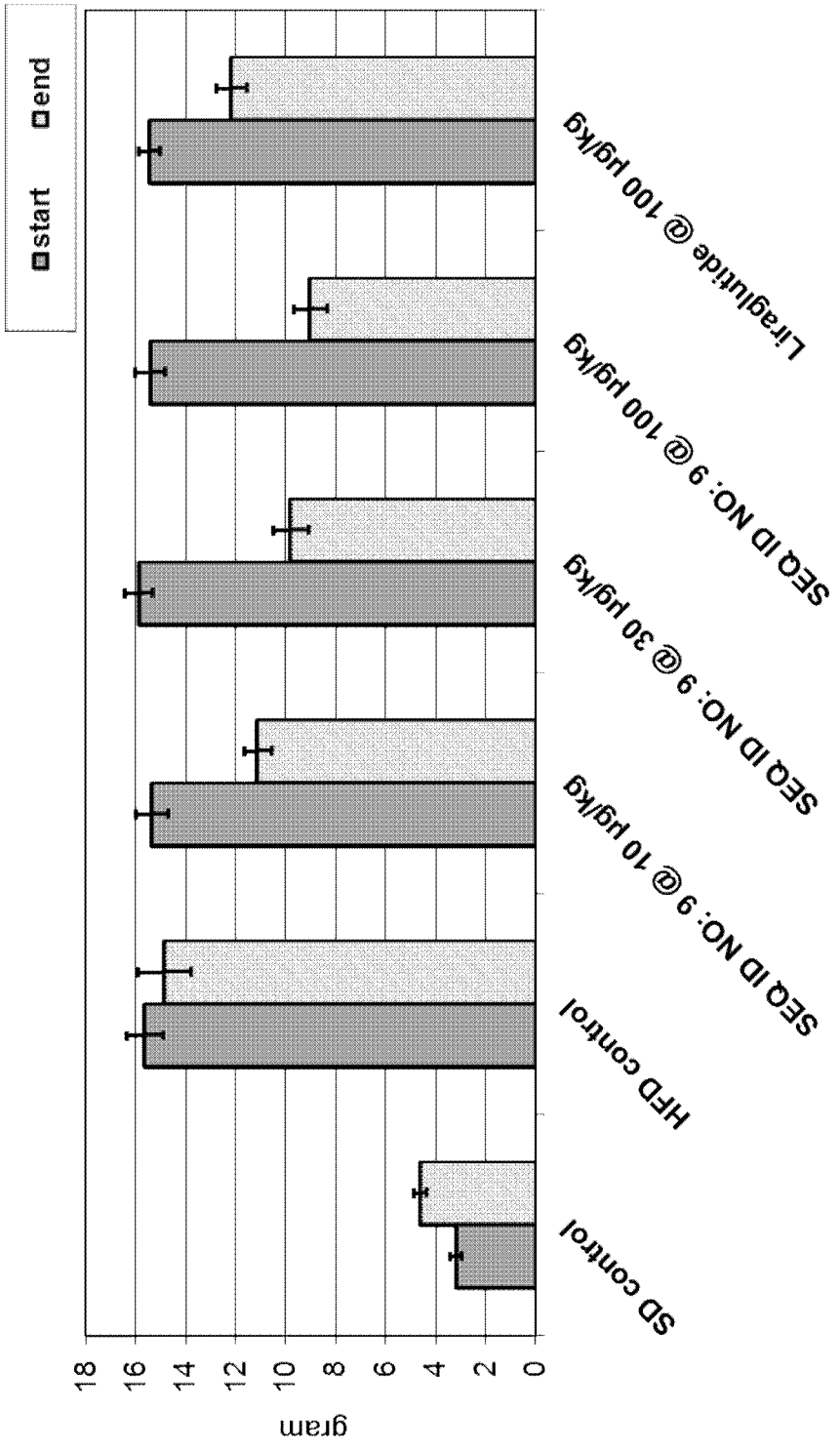

start
end
gram
0
2
4
6
8
10
12
14
16
18
SD control
HFD control
SEQ ID NO: 9 @ 10 µg/kg
SEQ ID NO: 9 @ 30 µg/kg
SEQ ID NO: 9 @ 100 µg/kg
Liraglutide @ 100 µg/kg

Fig. 7:

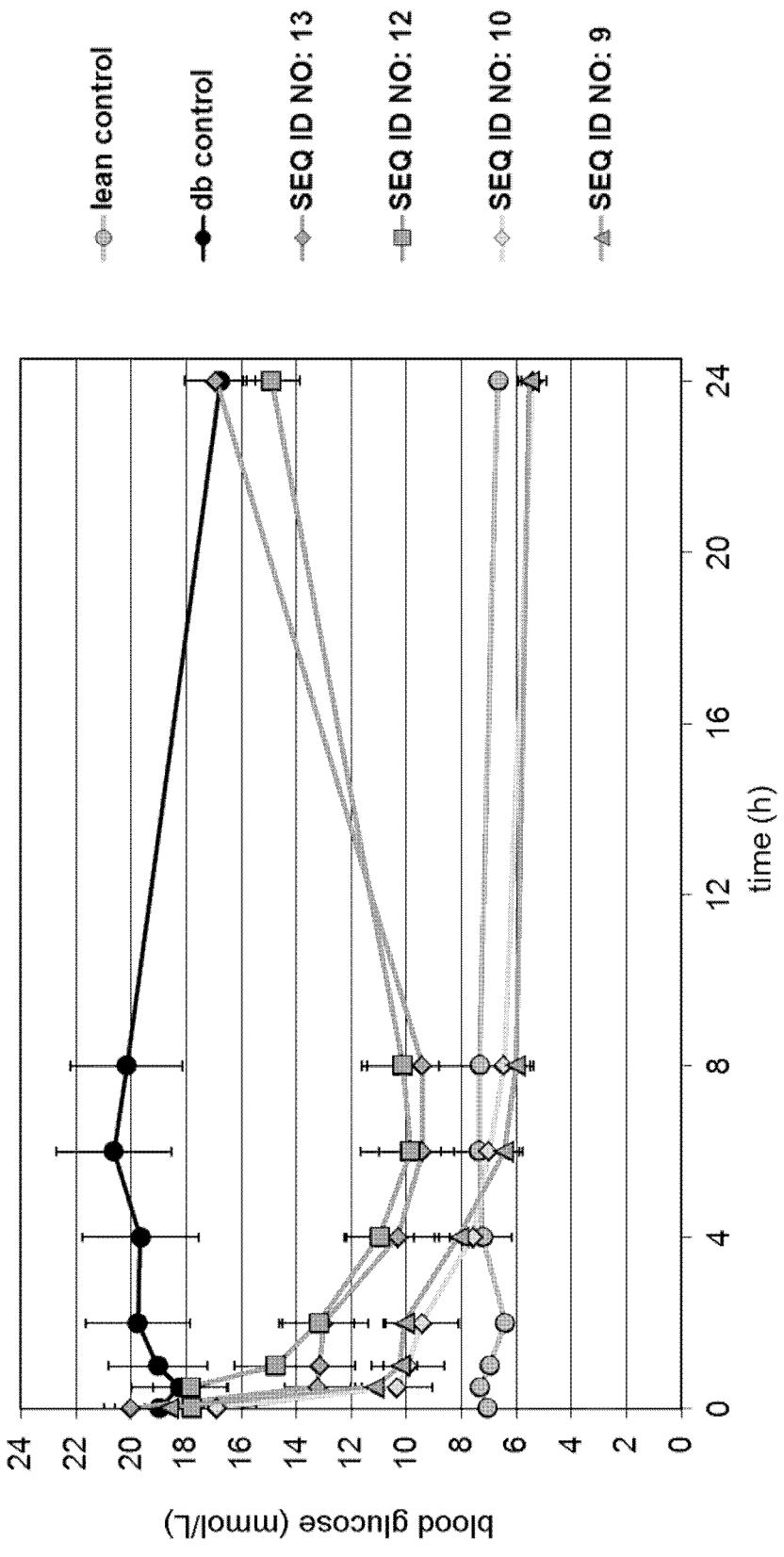

lean control
db control
SEQ ID NO: 13
SEQ ID NO: 12
SEQ ID NO: 10
SEQ ID NO: 9
blood glucose (mmol/L)
time (h)
0
2
4
6
8
10
12
14
16
18
20
22
24
0
4
8
12
16
20
24

Fig. 8:

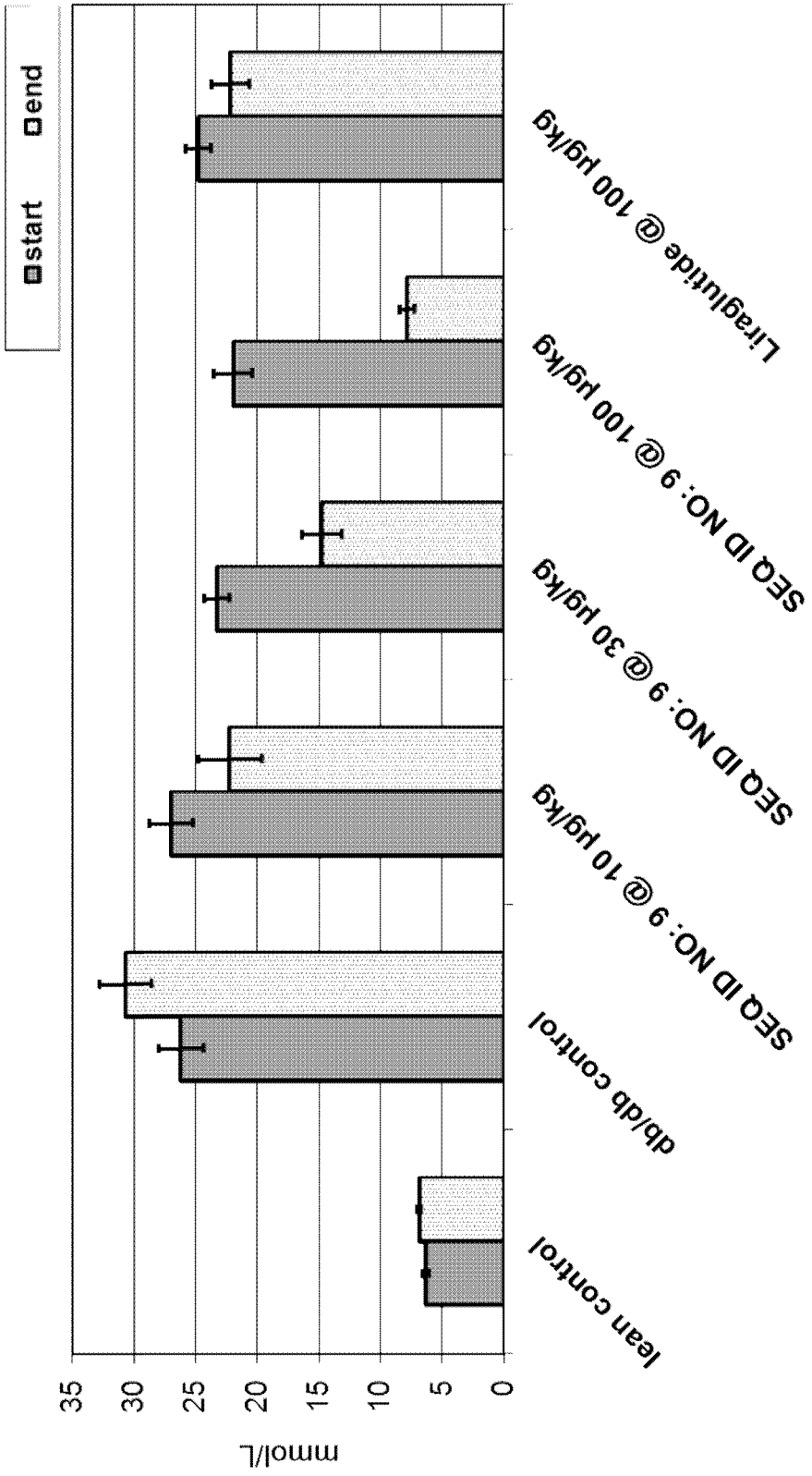

start
end
mmol/L
0
5
10
15
20
25
30
35
lean control
db/db control
SEQ ID NO: 9 @ 10 µg/kg
SEQ ID NO: 9 @ 30 µg/kg
SEQ ID NO: 9 @ 100 µg/kg
Liraglutide @ 100 µg/kg

Fig. 9:

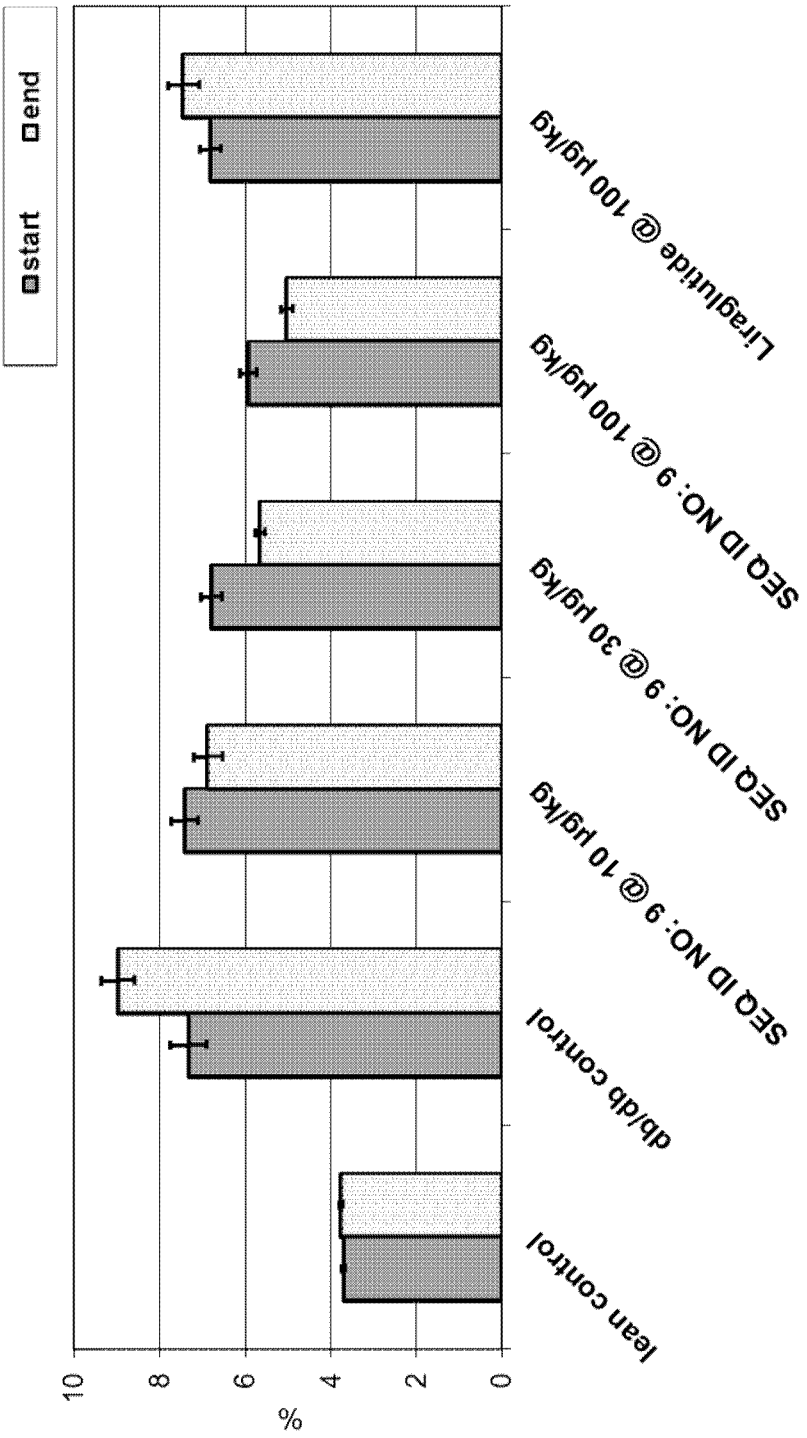

start
end
%
0
2
4
6
8
10
lean control
db/db control
SEQ ID NO: 9 @ 10 µg/kg
SEQ ID NO: 9 @ 30 µg/kg
SEQ ID NO: 9 @ 100 µg/kg
Liraglutide @ 100 µg/kg

Fig. 10:

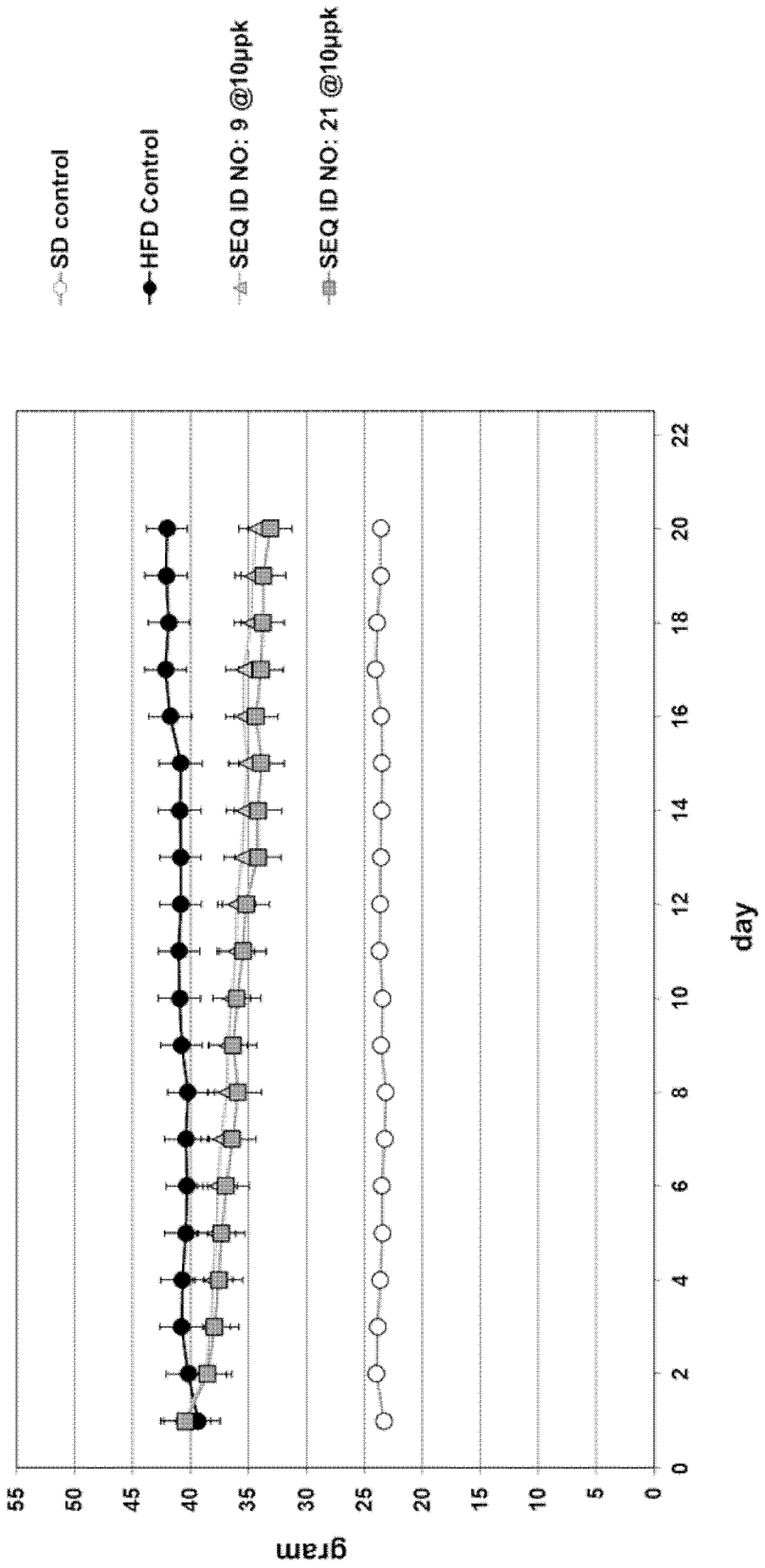

SD control
HFD Control
SEQ ID NO: 9 @10μpk
SEQ ID NO: 21 @10μpk
gram
day
55
50
45
40
35
30
25
20
15
10
5
0
0
2
4
6
8
10
12
14
16
18
20
22

Fig. 11:

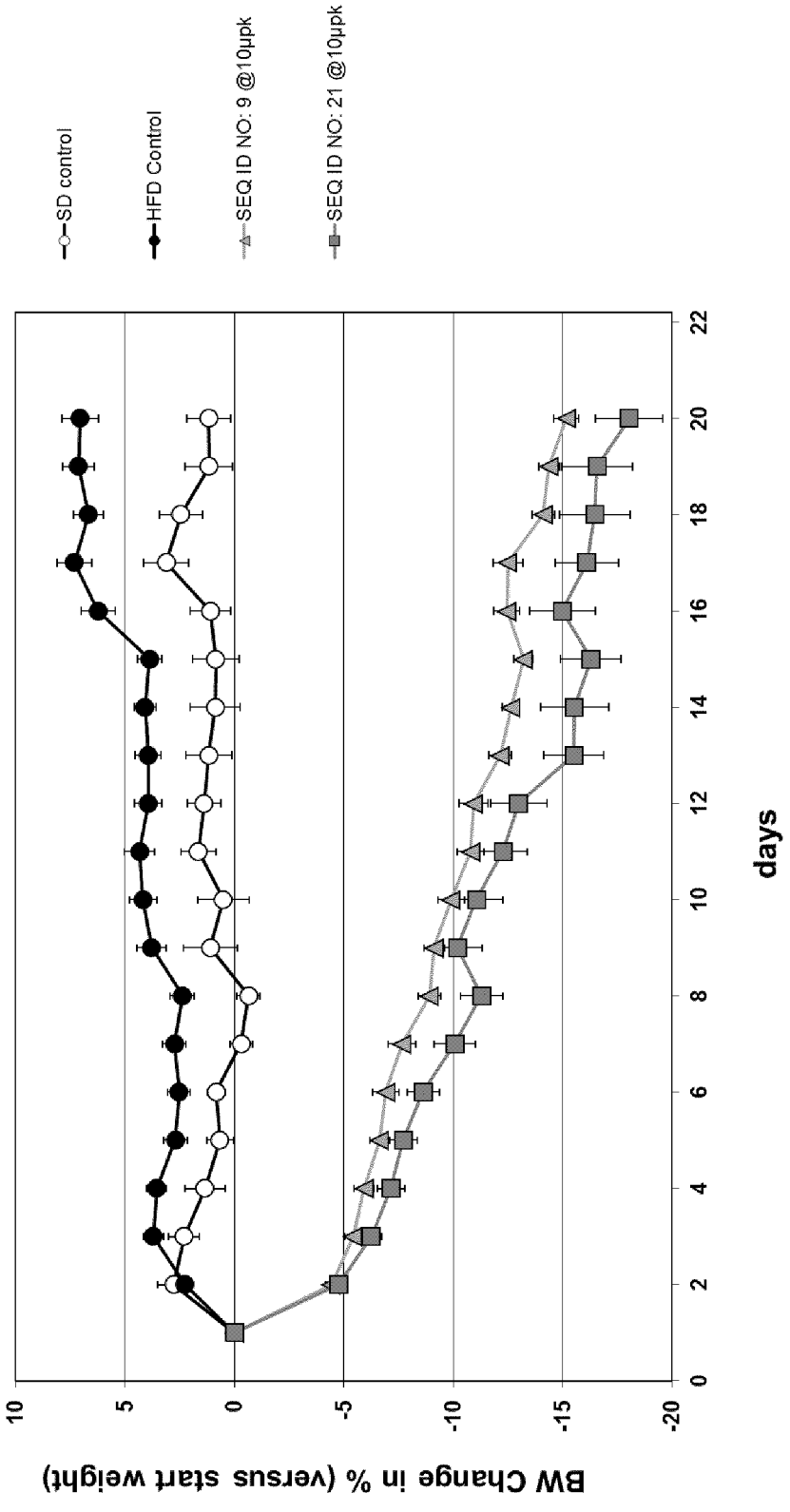

SD control
HFD Control
SEQ ID NO: 9 @10µpk
SEQ ID NO: 21 @10µpk
BW Change in % (versus start weight)
10
5
0
-5
-10
-15
-20
0
2
4
6
8
10
12
14
16
18
20
22
days

Fig. 12:

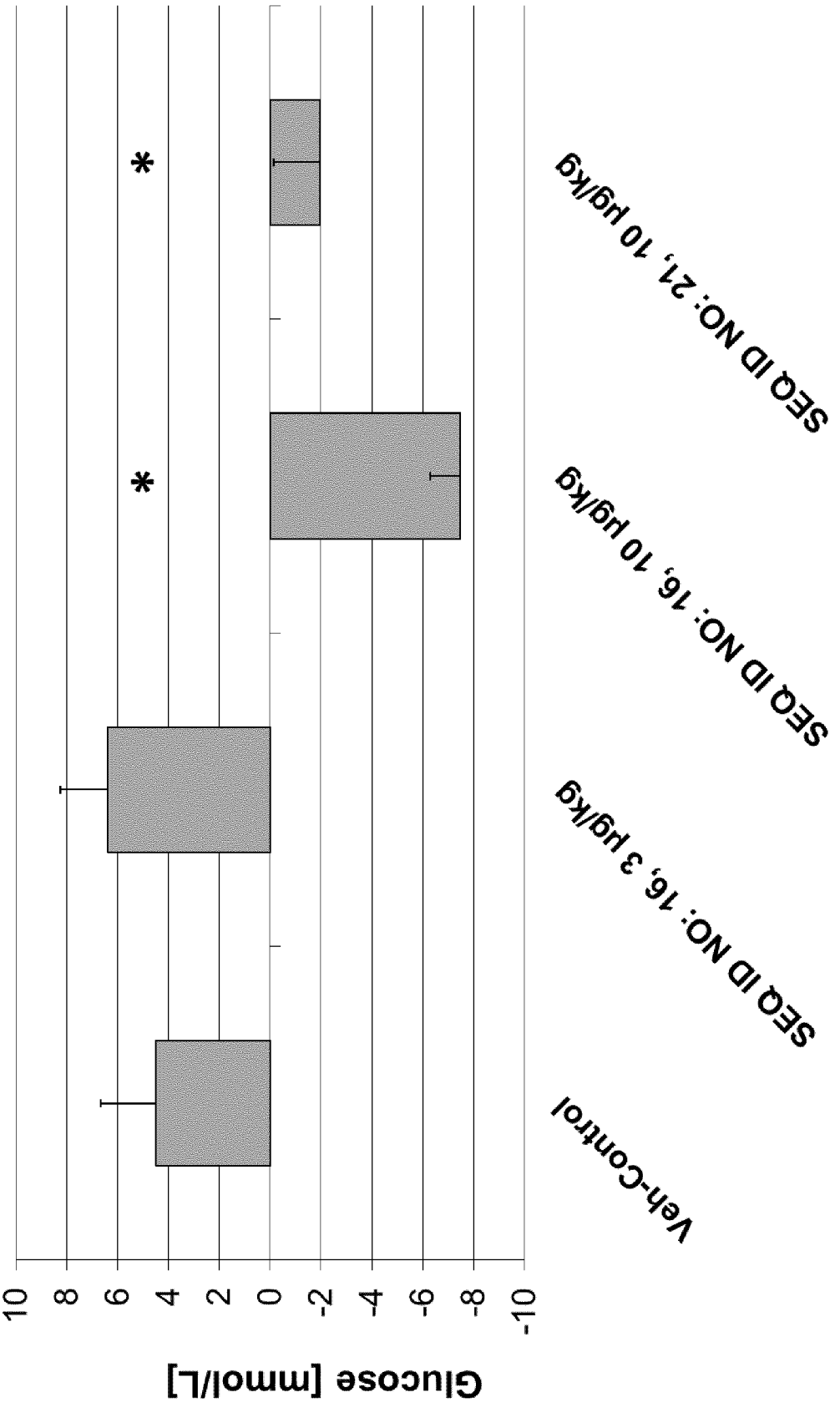

Glucose [mmol/L]
10
8
6
4
2
0
-2
-4
-6
-8
-10
*
*
Veh-Control
SEQ ID NO: 16, 3 µg/kg
SEQ ID NO: 16, 10 µg/kg
SEQ ID NO: 21, 10 µg/kg

Fig. 13:

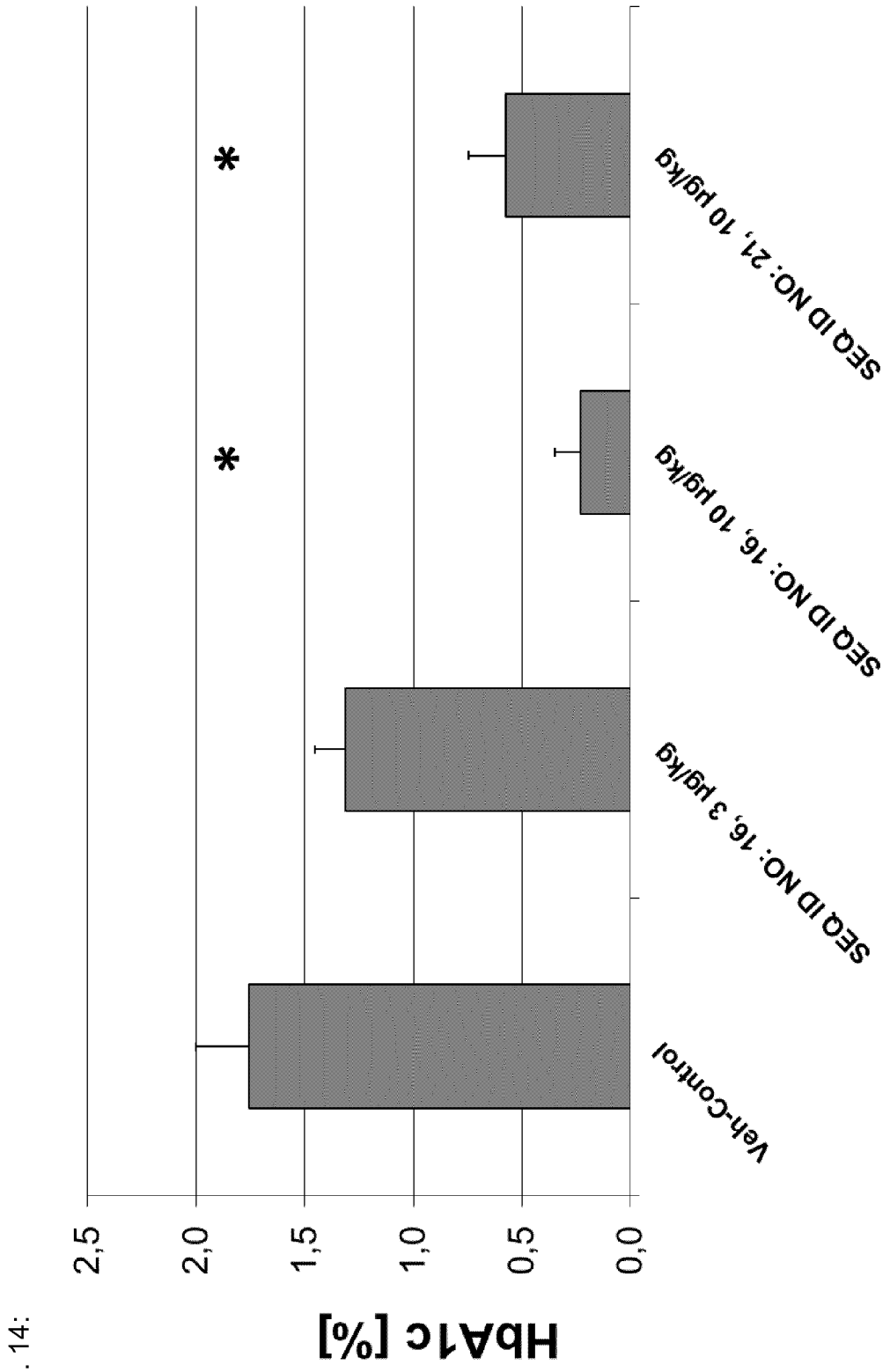

HbA1c [%]
2,5
2,0
1,5
1,0
0,5
0,0
Veh-Control
SEQ ID NO: 16, 3 µg/kg
SEQ ID NO: 16, 10 µg/kg
SEQ ID NO: 21, 10 µg/kg
*
*

Fig. 14:

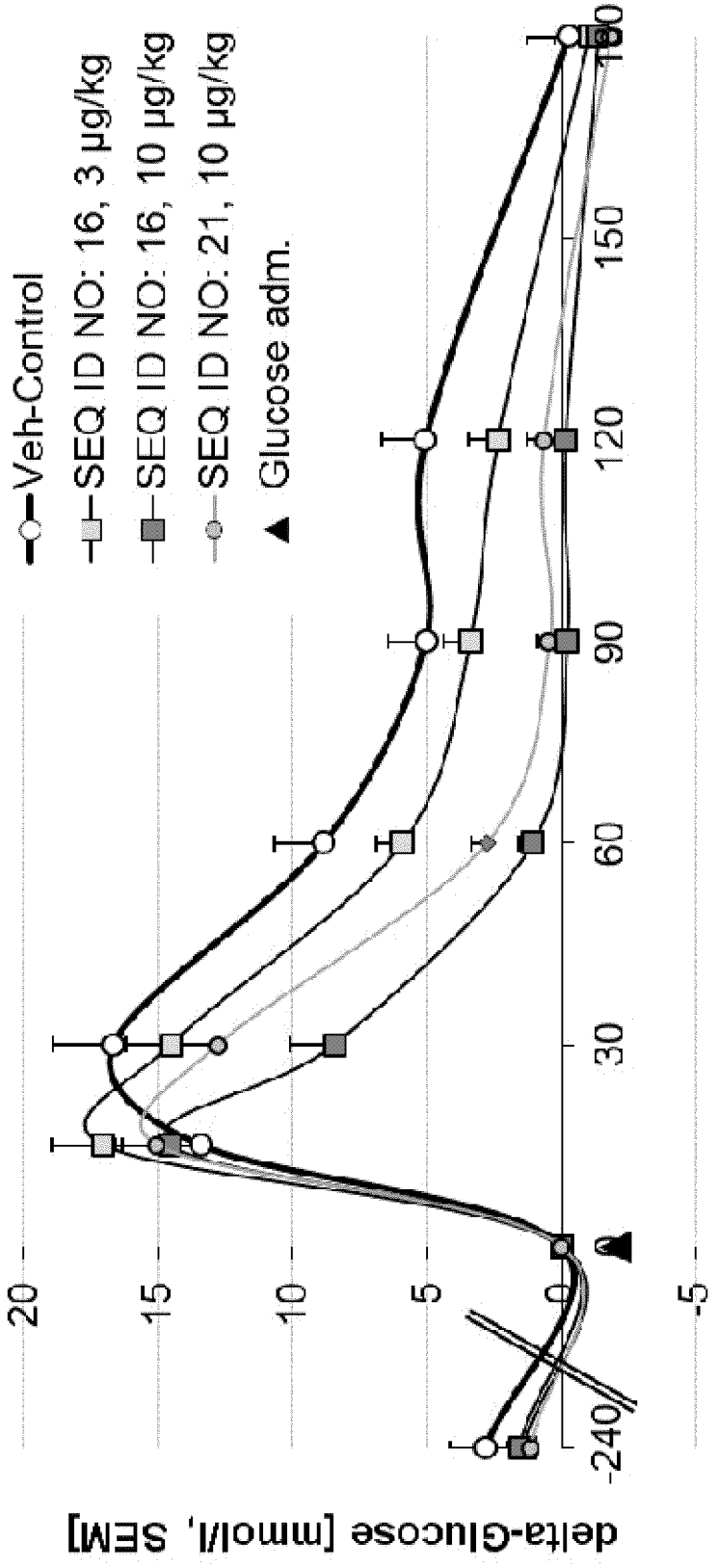

Veh-Control
SEQ ID NO: 16, 3 µg/kg
SEQ ID NO: 16, 10 µg/kg
SEQ ID NO: 21, 10 µg/kg
Glucose adm.
delta-Glucose [mmol/l, SEM]
Time [min]
20
15
10
5
0
-5
-240
0
30
60
90
120
150
180

Fig. 15:

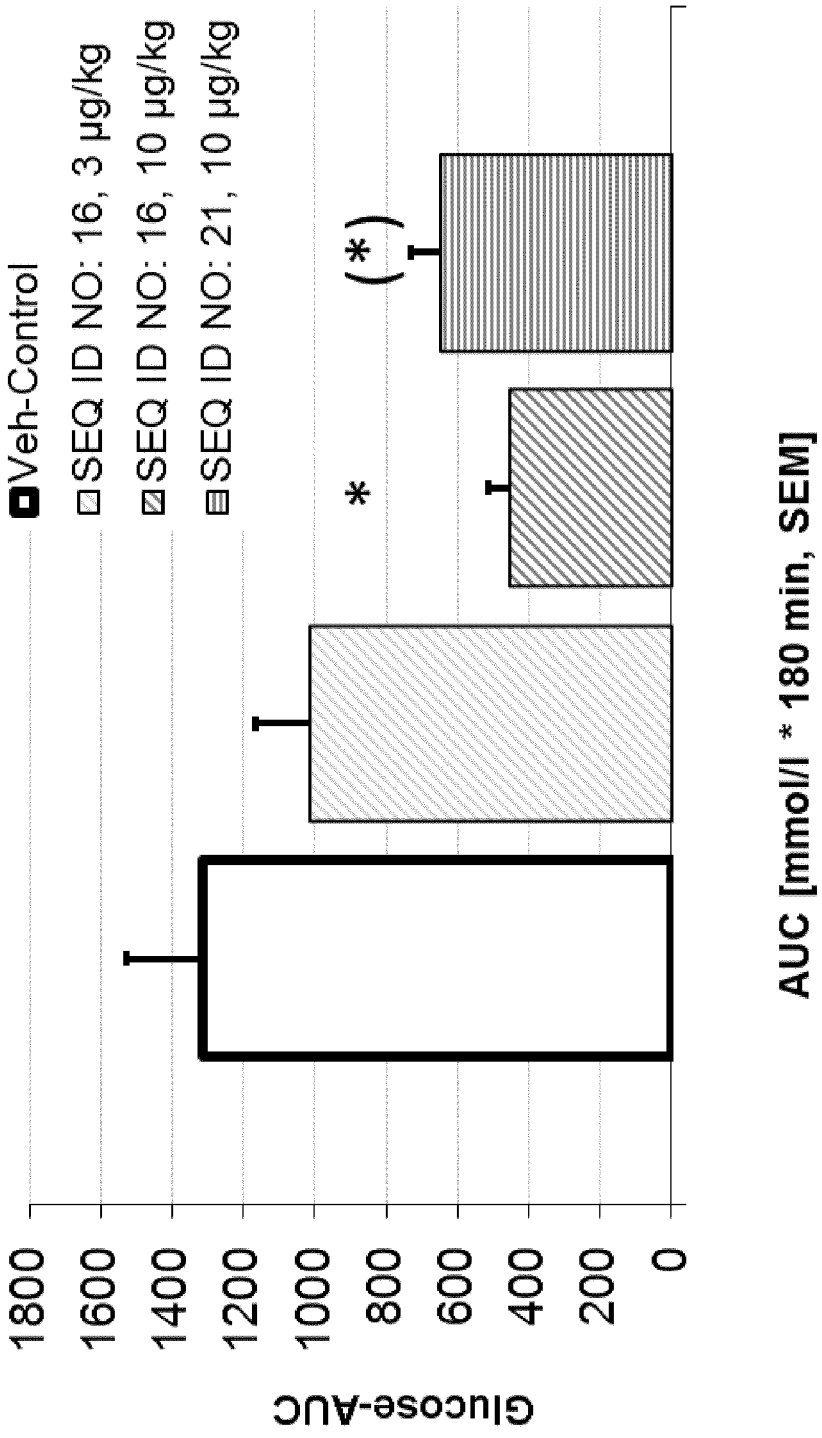

Glucose-AUC
AUC [mmol/l * 180 min, SEM]
1800
1600
1400
1200
1000
800
600
400
200
0
Veh-Control
SEQ ID NO: 16, 3 µg/kg
SEQ ID NO: 16, 10 µg/kg
SEQ ID NO: 21, 10 µg/kg
*
(*)

Fig. 16:

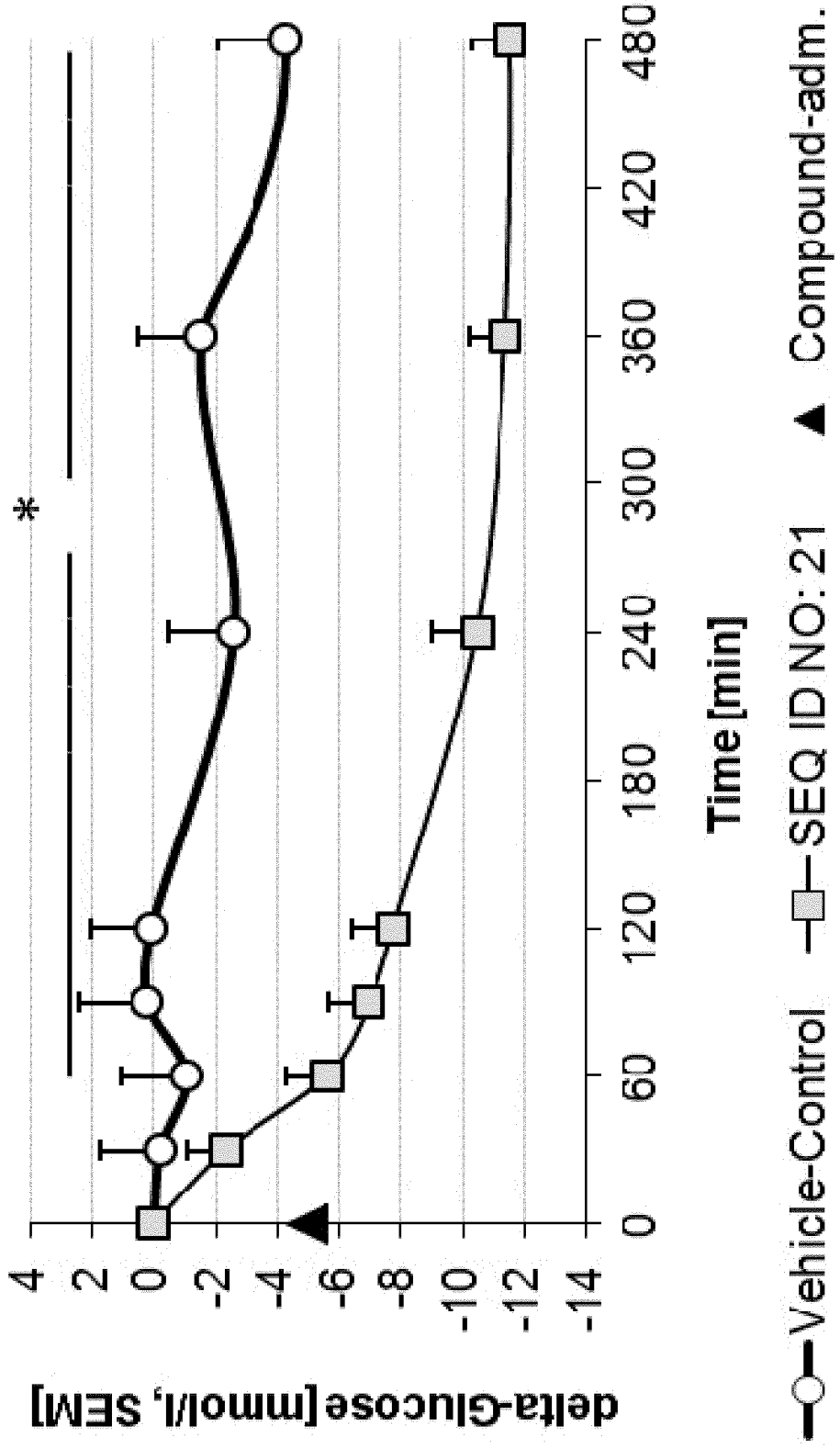

delta-Glucose [mmol/l, SEM]
4
2
0
-2
-4
-6
-8
-10
-12
-14
0
60
120
180
240
300
360
420
480
Time [min]
*
Vehicle-Control
SEQ ID NO: 21
Compound-adm.

Fig. 17:

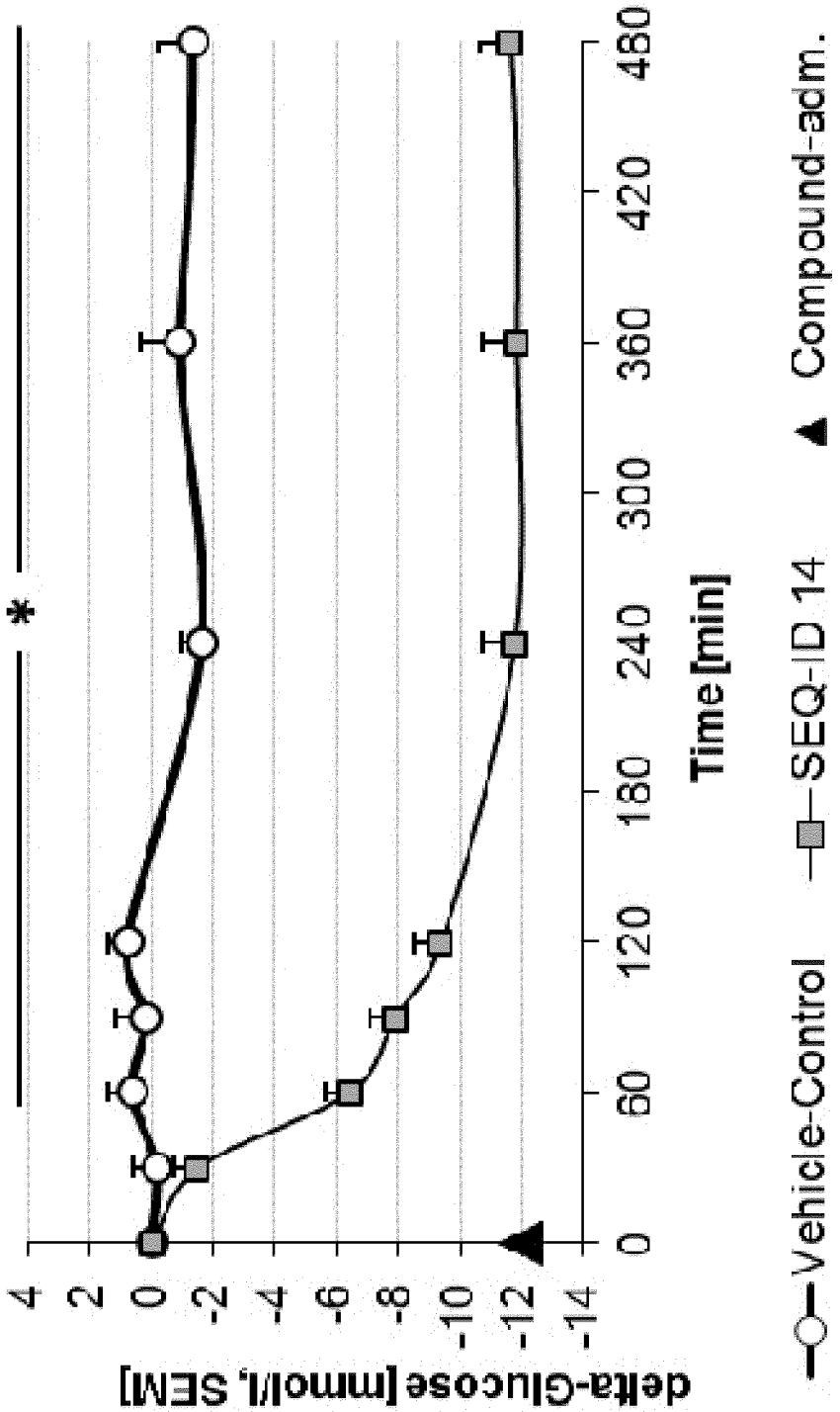

delta-Glucose [mmol/l, SEM]
4
2
0
-2
-4
-6
-8
-10
-12
-14
*
0
60
120
180
240
300
360
420
480
Time [min]
Vehicle-Control
SEQ-ID 14
Compound-adm.

Fig. 18: