FIGURE 1

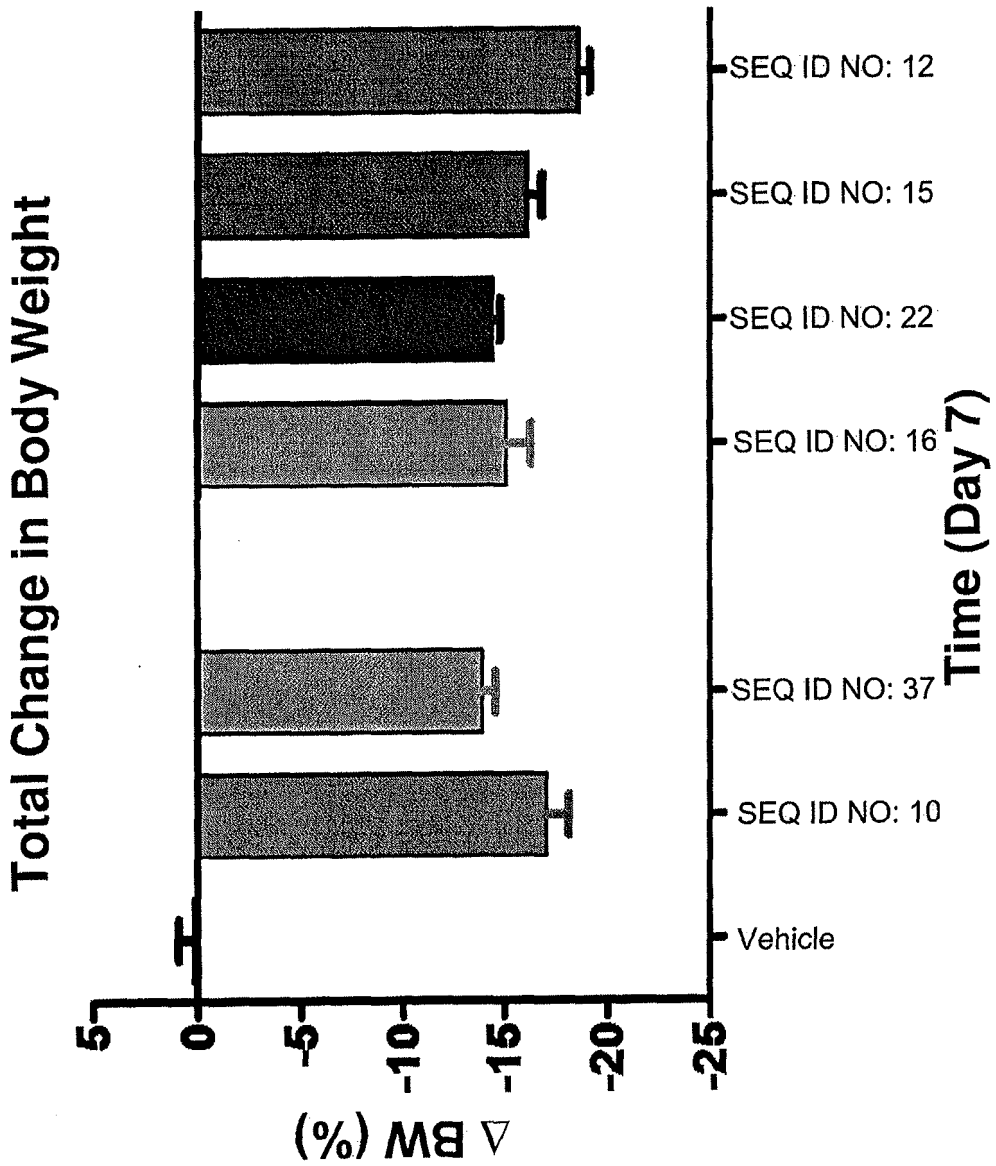

Total Change in Body Weight
SEQ ID NO: 12
SEQ ID NO: 15
SEQ ID NO: 22
SEQ ID NO: 16
SEQ ID NO: 37
SEQ ID NO: 10
Vehicle
Time (Day 7)
5
0
-5
-10
-15
-20
-25
Δ BW (%)

FIGURE 2

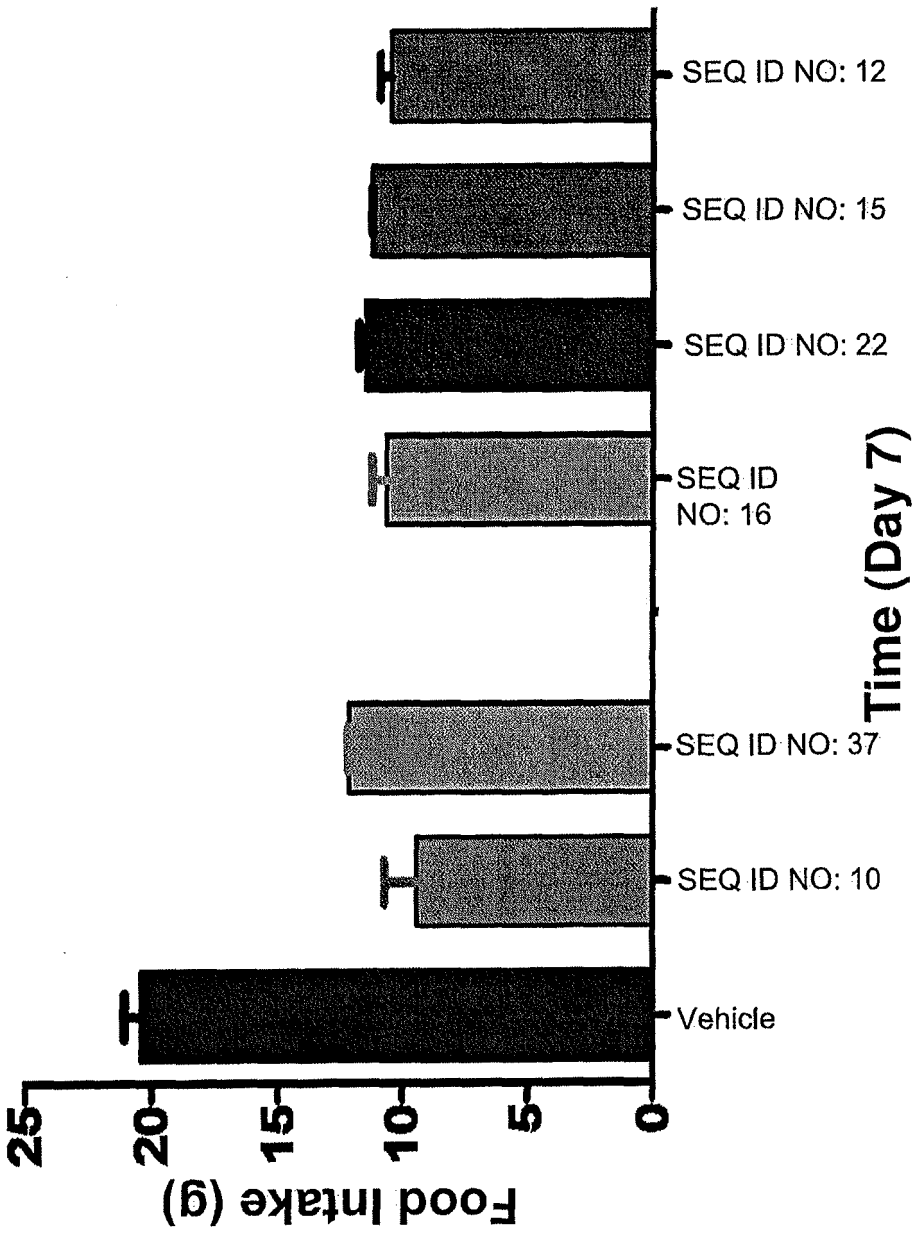

Total Food Intake
Food Intake (g)
25
20
15
10
5
0
Vehicle
SEQ ID NO: 10
SEQ ID NO: 37
SEQ ID NO: 16
SEQ ID NO: 22
SEQ ID NO: 15
SEQ ID NO: 12
Time (Day 7)

FIGURE 3

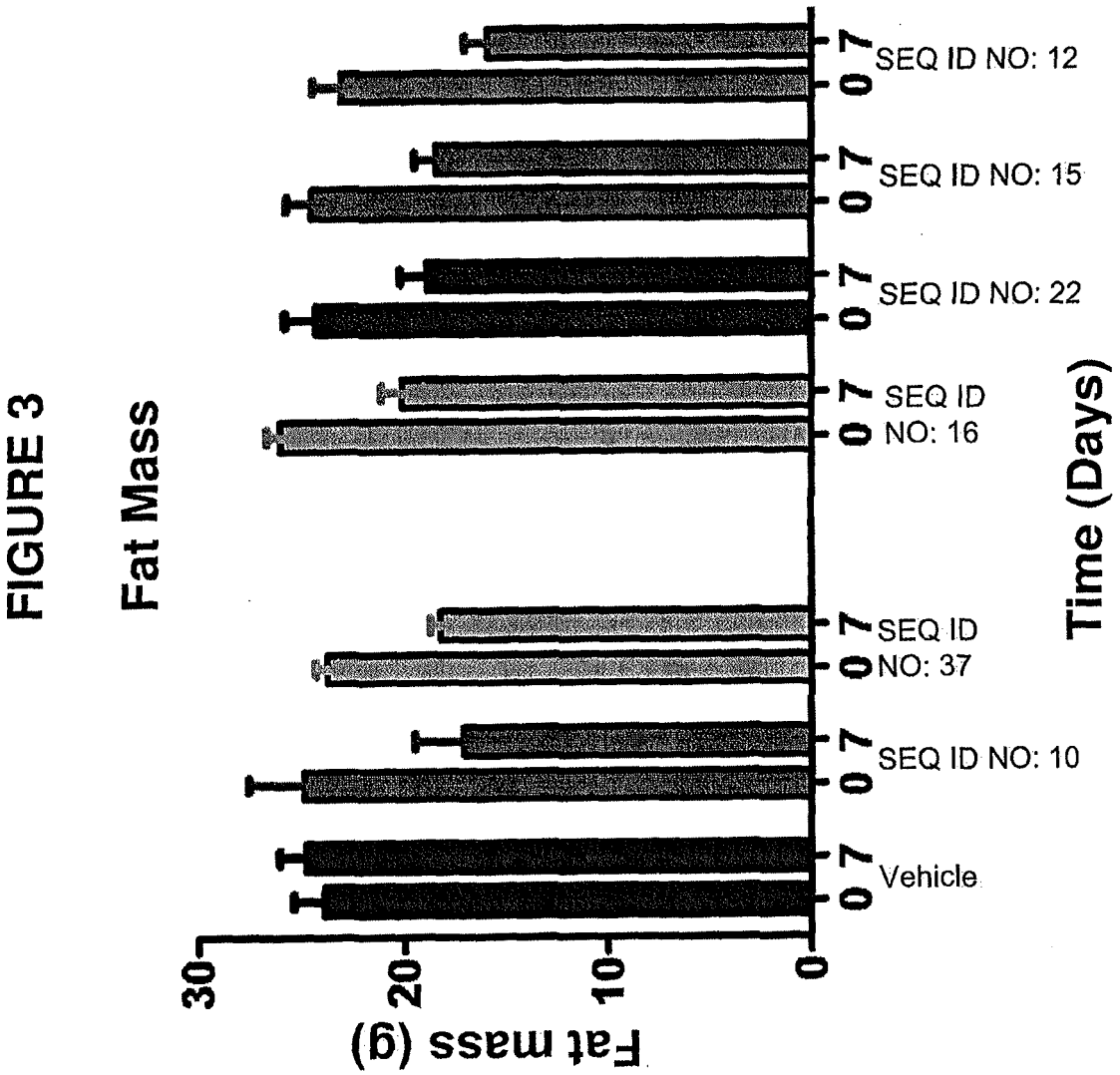

Fat Mass
Fat mass (g)
30
20
10
0
Time (Days)
0 7
SEQ ID NO: 12
SEQ ID NO: 15
SEQ ID NO: 22
SEQ ID NO: 16
SEQ ID NO: 37
SEQ ID NO: 10
Vehicle

FIGURE 4

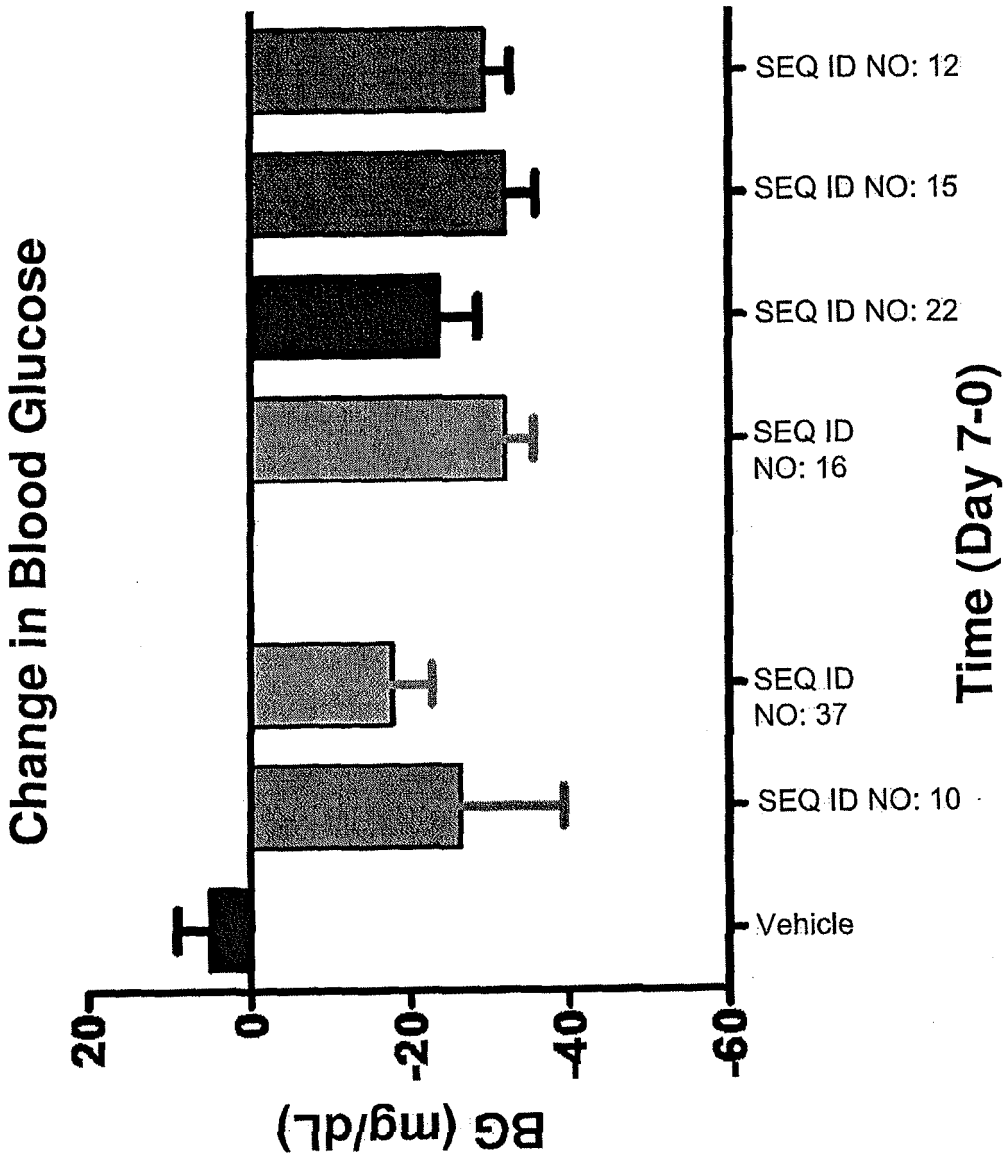

Change in Blood Glucose
BG (mg/dL)
20
0
-20
-40
-60
SEQ ID NO: 12
SEQ ID NO: 15
SEQ ID NO: 22
SEQ ID NO: 16
SEQ ID NO: 37
SEQ ID NO: 10
Vehicle
Time (Day 7-0)

FIGURE 5A

Amino Acid Sequence	SEQ ID NO:
Ac-yAQGTFTSDK(rE-C16)SKYLDERAAQDFVQWLLE G GPSSGAPPPS-NH_2	12
Ac-yAQGTFTSDK(γE-C16)SKYLDERAAQDFVQWLLE A GPSSGAPPPS-NH_2	146
Ac-yAQGTFTSDK(γE-C16)SKYLDERAAQDFVQWLLD A GPSSGAPPPS-NH_2	143
Ac-yAQGTFTSDK(γE-C16)SKYLDERAAQDFVQWLLD L GPSSGAPPPS-NH_2	153
Ac-YA QGTFTSDK(γE-C16)SKYLDERAAQDFVQWLLEG GPSSGAPPPS-NH_2	155
yA EGTFTSDK(γE-C16)SKYLDERAAQDFVQWLLEG GPSSGAPPPS-NH_2	147
Ac-yA EGTFTSDK(γE-C16)SKYLDERAAQDFVQWLLEG GPSSGAPPPS-NH_2	141

"Ac-y" = acetyl D-Tyr; "y" = D-Tyr; "Ac-Y" = acetyl L-Tyr;

FIGURE 5B

• Amino Acid Sequence	SEQ ID NO:
Ac-hA EGTFTSDK(γEC16)SKYLDERAAQDFVQWLL E G GPSSGAPPPS-NH_2	148
Haib QGTFTSDK(γEC16)SKYLDERAAQDFVQWLLDG GPSSGAPPPS-NH_2	10
Ac-hAQGTFTSDK(γEC16)SKYLDERAAQDFVQWLLEA GPSSGAPPPS-NH_2	151
Ac-yAQGTFTSDYSKYLDERAAQDFVQWLLEG GPSSGAPPPSK(γEγE-C16)G-NH_2	149
Ac-yAQGTFTSDYSKYLDERAAQDFVQWLLEA GPSSGAPPPSK(γEγE-C16)G-NH_2	159
Ac-YAqGTFTSDK(γEC16)SKYLDERAAQDFVQWLLEG GPSSGAPPPS-NH_2	158

"Ac-y" = acetyl D-Tyr; "Ac-h" = acetyl D-His, "aib" = aminoisobutyric acid; Ac-Y = acetyl L-Tyr; "q" = D-Gln

FIGURE 5C

• Amino Acid Sequence	SEQ ID NO:	
Ac-y AEGTFTSDXSKYLDERAAQDFVQWLLEA GPSSGAPPPS	144	X = K-γE-C16
desNH$_2$-YAEGTFTSDXSKYLDERAAQDFVQWLLEG GPSSGAPPPS	145	X = K-γE-C16
Ac-h AEGTFTSDXSKYLDERAAQDFVQWLLEA GPSSGAPPPS	154	X = K-γE-C16
Ac-hAQGTFTSDYSKYLDERAAQDFVQWLLEGG PSSGAPPPSZG-NH2	152	Z = K-γE-γE-C16
HO-benzoylAQGTFTSDXSKYLDERAAQDFVQWLLEG GPSSGAPPPS-NH$_2$	156	X = K(γEC16)
Ac-fA QGTFTSDXSKYLDERAAQDFVQWLLEG GPSSGAPPPS-NH$_2$	150	X = K(γEC16)

"Ac-y" = acetyl D-Tyr; "desNH$_2$ Y" = desamino L-Tyr; "Ac-h" = acetyl D-His; "HO-benzoyl" = 4-hydroxyphenylacetic acid; "Ac-f" = acetyl D-Phe

FIGURE 5D

• Amino Acid Sequence	SEQ ID NO:
desNH$_2$YAQGTFTSDY SKYLDERAAQDFVQWLLEG GPSSGAPPPSK(γEγE-C16)G-NH$_2$	160
desNH$_2$YAQGTFTSDY SKYLDERAAQDFVQWLLEG GPSSGAPPPSK(C16)G-NH$_2$	157
Ac-γAL GTFTSDK(γEC16) SKYLDERAAQDFVQWLLEG GPSSGAPPPS-NH$_2$	142

"Ac-γ" = acetyl D-Tyr; "desNH$_2$ Y" = desamino L-Tyr

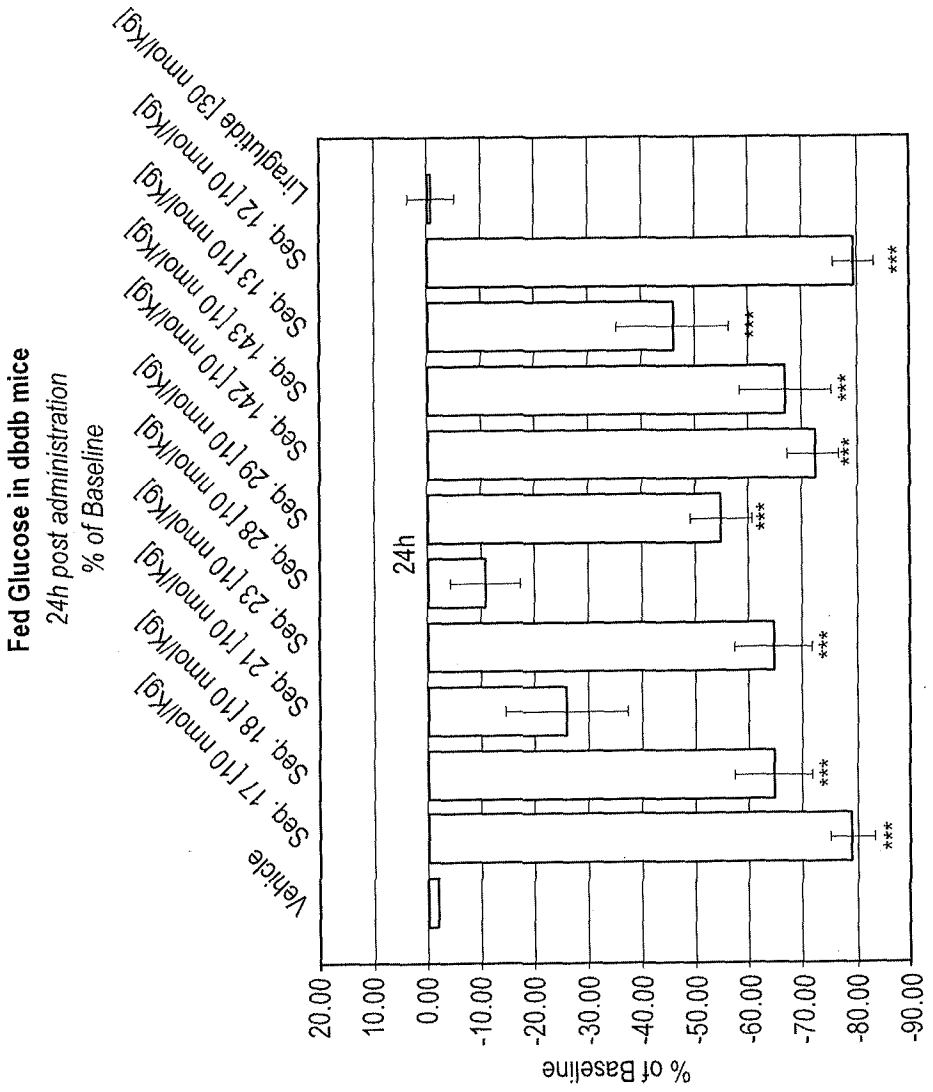

Fed Glucose in dbdb mice
24h post administration
% of Baseline
% of Baseline
20.00
10.00
0.00
-10.00
-20.00
-30.00
-40.00
-50.00
-60.00
-70.00
-80.00
-90.00
24h
***
Vehicle
Seq. 17 [10 nmol/kg]
Seq. 18 [10 nmol/kg]
Seq. 21 [10 nmol/kg]
Seq. 23 [10 nmol/kg]
Seq. 28 [10 nmol/kg]
Seq. 29 [10 nmol/kg]
Seq. 142 [10 nmol/kg]
Seq. 143 [10 nmol/kg]
Seq. 13 [10 nmol/kg]
Seq. 12 [10 nmol/kg]
Liraglutide [30 nmol/kg]

FIGURE 6