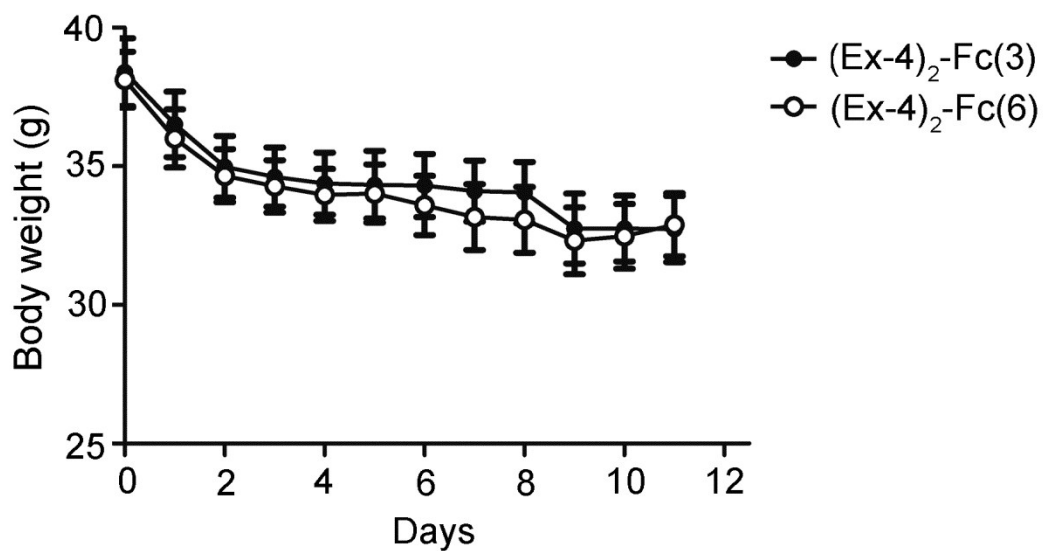
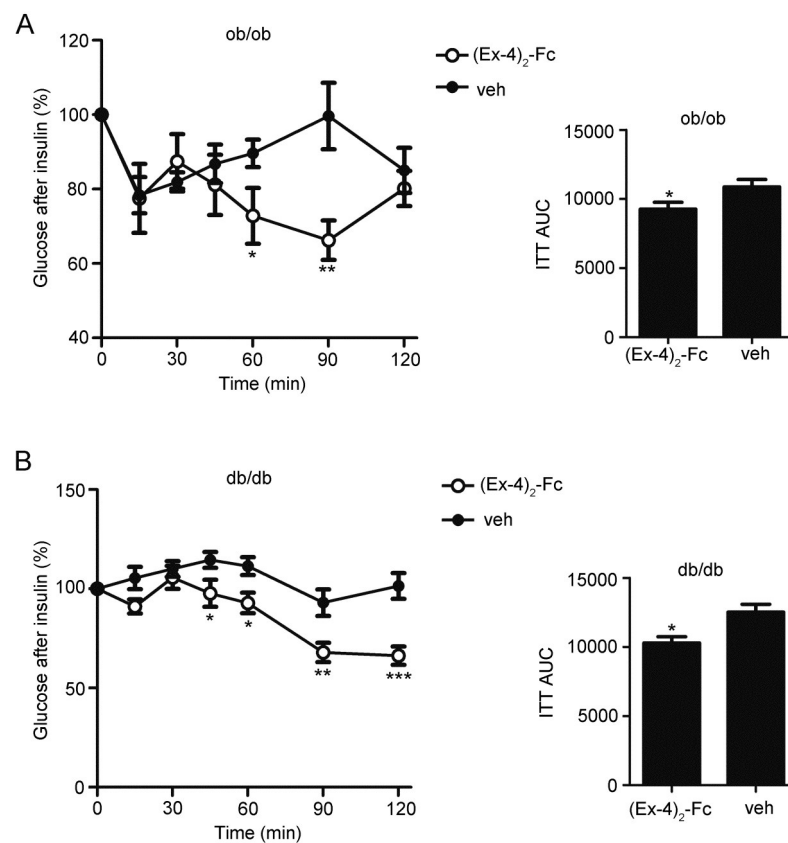


Supplement Figure 1:



Supplement Figure 1. Exploration of (Ex-4)₂-Fc administration time. Body weight of DIO mice, (Ex-4)₂-Fc(3) group and (Ex-4)₂-Fc(6) group were given 0.9mg/kg (Ex-4)₂-Fc once every 3 days , and 1.8 mg/kg (Ex-4)₂-Fc once every 6 days, respectively .

Supplement Figure 2:



Supplement Figure 2. Administration of (Ex-4)₂-Fc improves insulin tolerance in ob/ob and db/db mice. Intraperitoneal (i.p.) insulin tolerance test (ITT; 0.5U insulin/kg body weight, n = 6) was performed in 5h fasted mice. Blood was sampled from the tail vein of mice at 0, 15, 30, 45, 60, 90 and 120 min. A. Percent change of blood glucose level in serum insulin response and area under curve of ITT in ob/ob mice; B. Percent change of blood of blood glucose level and area under curve of ITT in db/db mice. Data are shown as the mean ± S.E.M. *P<0.5, **P<0.01 and ***P<0.001 vs NS group.

Supplement Table 1: Parameters of Biochemical Markers from DIO Mice . Data are shown as the mean \pm S.E.M. *P<0.05 and **P<0.01 vs HFD-veh.

	STD-veh	HFD-(Ex-4)2-Fc	HFD-veh
ALT (U/L)	40.67 \pm 11.05	38.00 \pm 13.06	44.00 \pm 3.46
AST (U/L)	140.00 \pm 22.55	112.00 \pm 27.76	100.00 \pm 14.9
TP (g/L)	50.50 \pm 5.35	54.37 \pm 6.91	48.87 \pm 0.70
ALB (g/L)	25.10 \pm 1.95	28.20 \pm 2.65	24.17 \pm 0.43
ALP (U)	31.00 \pm 8.66	36.00 \pm 1.73	25.33 \pm 0.88
BUN (mM)	13.37 \pm 1.25	10.00 \pm 2.42	9.10 \pm 0.53
UA (μ M)	101.33 \pm 17.17	116.00 \pm 26.58	94.33 \pm 8.76
CHOL (mM)	1.52 \pm 0.24*	1.36 \pm 0.10**	3.38 \pm 0.32
TG (mM)	1.49 \pm 0.29	1.04 \pm 0.14	1.30 \pm 0.11
HDL (mM)	1.96 \pm 0.14**	1.26 \pm 0.06**	0.51 \pm 0.09
LDL (mM)	0.19 \pm 0.04**	0.17 \pm 0.01**	0.49 \pm 0.05