

Akebia saponin D decreases hepatic steatosis through autophagy modulation

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Supplemental Table 1. Effects of ASD on indices of adiposity and insulin sensitivity of mice.

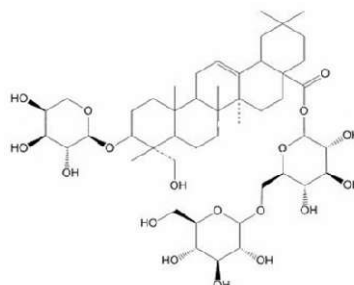
Parameter	C57BL/6J	ob/ob				
	Sal	Sal	SM(20mg/kg)	ASD(30mg/kg)	ASD(60mg/kg)	ASD(120mg/kg)
Body weight (g)	23.38±0.19	55.9±0.54 ^{##}	53.75±1.05	54.73±1.12	53.96±1.43	51.25±1.24 ^{**}
Fat pad weight(g)	0.27±0.02	3.90±0.04 ^{##}	3.36±0.22 ^{**}	3.70±0.08	3.30±0.10 ^{**}	2.78±0.18 ^{**}
Indices of adiposity (%)	1.15±0.16	6.98±0.11 ^{##}	6.25±0.21	6.76±0.18	6.11±0.15	5.42±0.17 ^{**}
Liver weight (g)	0.89±0.12	3.92±0.11 ^{##}	3.62±0.17	3.87±0.17	3.62±0.14	2.90±0.17 ^{**}
Liver/body weight (%)	3.81±0.14	7.01±0.22 ^{##}	6.73±0.26	7.07±0.14	6.71±0.32	5.66±0.15 ^{**}
Fasting glucose (mmol/L)	8.16±1.29	26.22±1.79 ^{##}	23.84±1.98	24.17±0.77	22.48±1.99	21.68±1.79 ^{**}
Fasting insulin (mIU/L)	6.36±0.12	190.85±60.15 ^{##}	186.08±65.17	183.66±60.35 [*]	179.35±47.26 ^{**}	173.12±38.57 ^{**}
HOMA-IR	2.31±0.32	222.40±35.73 ^{##}	197.16±41.26 ^{**}	197.29±40.26 ^{**}	179.19±25.21 ^{**}	166.81±18.18 ^{**}

Results are presented as means ± S.E.M., n = 6, Compared with normal control: ^{##}P < 0.01; compared with ob/ob

mice: ^{*}P < 0.05, ^{**}P < 0.01.

HOMA-IR = (fasting glucose levels [mmol/L]×fasting insulin levels [mIU/L])/22.5

Supplemental Figure 1. The chemical structure of Akebia saponin D.



Supplemental Figure 2. HPLC chromatogram of Akebia saponin D.

(A) ASD Standard , (B) ASD Sample

$$C_{\text{Standard}} = \frac{1.80\text{mg}}{10\text{mL}} \times 92.5\% = 0.1665\text{mg/mL}, \quad A_{\text{Standard}} = 292556, \quad A_{\text{Sample}} = 294161,$$

$$V_{\text{Sample}} = 10\text{mL}, \quad M_{\text{Sample}} = 1.68\text{mg}.$$

$$\text{Purity (\%)} = \frac{C_{\text{Standard}} \times A_{\text{Sample}} \times V_{\text{Sample}}}{M_{\text{Sample}} \times A_{\text{Standard}}} \times 100\% = \frac{0.1665 \times 294161 \times 10}{1.68 \times 292556} \times 100\% =$$

99.65%

