Supplementary materials:

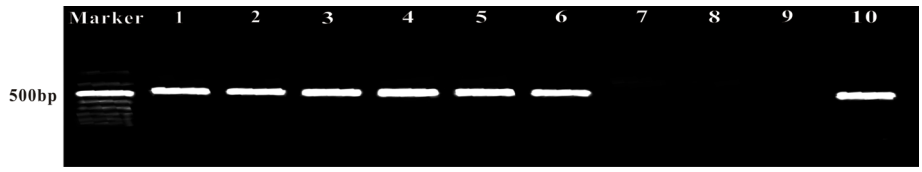

Fig. S1 The identification of targeted Rip-Tag2 transgenic mice with PCR technology. The primer sequences used were shown as follows: the forwards primer is 5'-GGACAAACCACAACTAGAATGCAG-3' and reverse primer is 5'-CAGAGCAGAATTGTGGAGTGG-3'. PCR conditions: 94 ℃ 2 min; 94 ℃ 30 sec, 56 ℃ 30 s, 72 ℃ 30 s (35 cycles); 72 ℃10 min. The targeted Rip1-Tag2 size is about 500bp, shown in lane 1-6 and 10. Correspondingly, the 7-9 lanes without 500bp mark represented the background mice C57, as negative control in this study.

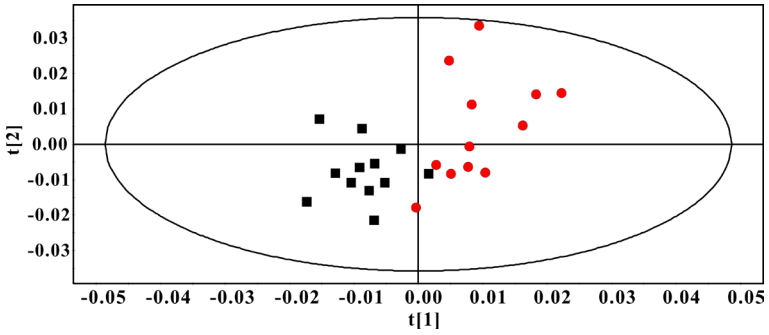

Fig. S2 Scores plot of principal component analysis of sera ^{1}H NMR spectra data in C57 and Rip1-Tag2 mice at 3 weeks. C57 (■), Rip1-Tag2 (●). (R^2=76.1%, Q^2=66.8%)