

**Figure S1.** The expression of *GATA3* gene in abdominal adipose tissue. (A) qRT-PCR analysis of *GATA3* gene expression in the abdominal fat tissue of lean and fat broiler lines of NEAUHLF (n=15) from 1 to 7 weeks of age. *NONO* was used as an internal control. Values represent mean $\pm$ SD from three independent experiments. The double asterisk indicates a significant difference between fat and lean broilers (student's *t*-test) P < 0.01 (\*\*). (B) qRT-PCR analysis of *GATA3* gene expression in abdominal fat tissue of male broilers from 1 to 7 weeks of age (each age, each line n =5) was analyzed by qRT-PCR. *NONO* was used as an internal control. Values represent mean $\pm$ SD from three independent experiments. Asterisks indicate significant differences between the fat and lean broilers (student's *t*-test) P < 0.05 (\*) or P < 0.01 (\*\*). The different lowercase letters above bars indicate significant differences *GATA3* expression levels among the indicated ages (GLM followed by Tukey' HSD multiple tests, P < 0.01), 1-7 w = 1-7 weeks of age.

PCR amplification of chicken *NONO* was performed by using the primers (forward primer, 5'- GCGTTTTGCTGCTGTTATTATGAG-3'; reverse primer, 5'-TCCTTGCTGCCAGTCTGGAC-3'.