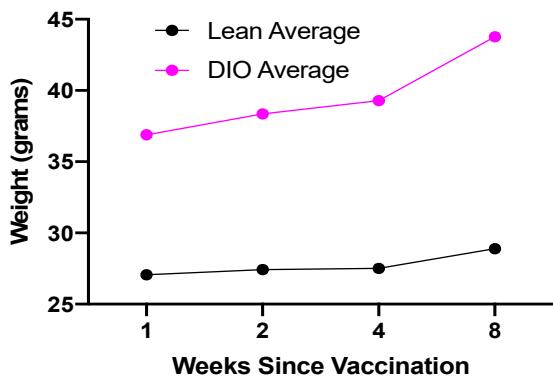
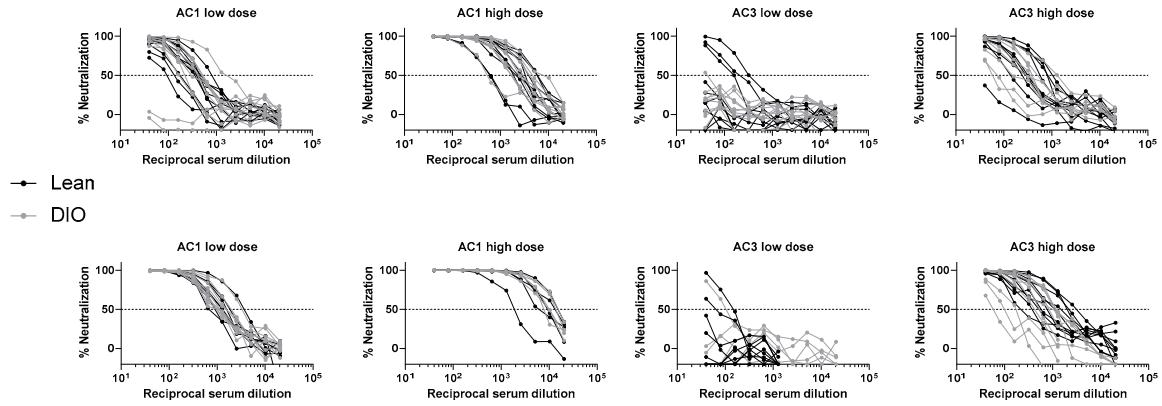


**Figure S1**



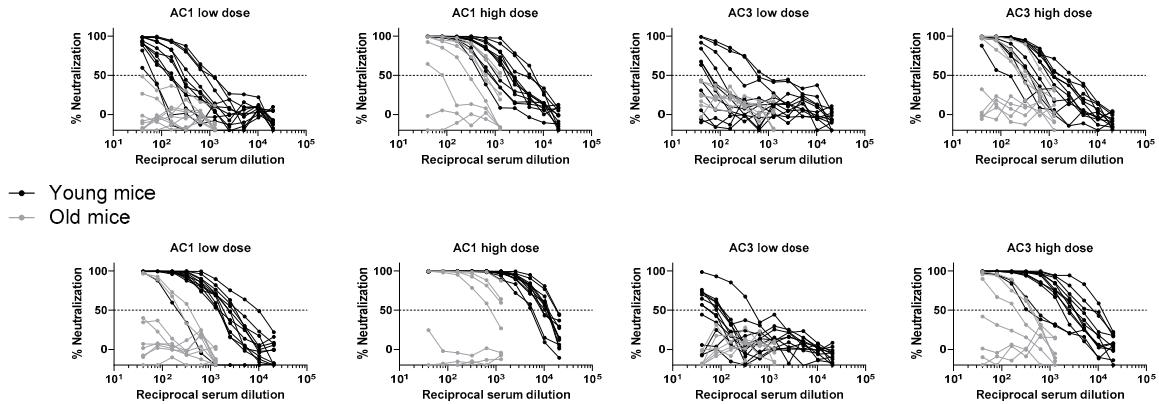
**Figure S1.** Weight of mice in high fat diet (DIO) versus lean mice. Data points represented as group average in grams. Dotted lines indicate lower limit of detection.

**Figure S2**



**Figure S2.** Neutralization curves of individual mice lean or diet-induced obese (DIO) mice treated with AC1 and AC3 at two doses 28 days (upper row) and 56 days (lower row) after vaccination.

**Figure S3**



**Figure S3.** Neutralization curves of individual young and aged mice treated with AC1 and AC3 at two doses 4 weeks (upper row) and 7-8 weeks (lower row) after vaccination.