

1 **Supplemental Figure Legends**

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3 **Supplemental Figure 1.** *Tlr2*<sup>-/-</sup>*ApoE*<sup>-/-</sup> mice were generated from heterozygote intercrosses  
4 of the *ApoE*<sup>-/-</sup> and *Tlr2*<sup>-/-</sup> mice. Genotyping was performed by PCR analysis of DNA  
5 extracted from tail biopsies, using specific primer sets which amplified the wild type (WT)  
6 and knockout (KO) gene of *apoe* and *tlr2*, respectively. Results shown are from individual  
7 heterozygous and homozygous mouse. All mice utilized in this study were genotyped with  
8 the same results.

9

10 **Supplemental Figure 2.** Body weight of seven-month old *ApoE*<sup>-/-</sup> and *Tlr2*<sup>-/-</sup>*ApoE*<sup>-/-</sup> mice.  
11 No significant differences in body weight were observed between groups of male or female  
12 *Tlr2*<sup>-/-</sup>*ApoE*<sup>-/-</sup> and *ApoE*<sup>-/-</sup> mice. AM, *ApoE*<sup>-/-</sup> male mice; ATM, *Tlr2*<sup>-/-</sup>*ApoE*<sup>-/-</sup> male mice; AF,  
13 *ApoE*<sup>-/-</sup> female mice; ATF, *Tlr2*<sup>-/-</sup>*ApoE*<sup>-/-</sup> female mice. N = 8 / group. Data were analyzed by  
14 One-way ANOVA. *P* < 0.05 was considered significant.

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16 **Supplemental Figure 3.** TLR2 deficiency reduces atherosclerosis in the *ApoE*<sup>-/-</sup> mice. After  
17 dissection, whole aortas were stained with Sudan IV to assess plaque area. Representative

1 micrographs of plaque accumulation of five-month old mice (A) and seven-month old mice (B)  
2 are shown. Quantified plaque area of five-month old mice (C) and seven-month old mice (D)  
3 are shown. Each point represents a single mouse and the horizontal line represents mean  
4 plaque area for each group (n = 8). \*  $P < 0.05$ ; \* \*  $P < 0.005$  by two-tail Student  $t$ -test.

5

6 **Supplemental Figure 4.** Total and free cholesterol levels in  $Apoe^{-/-}$  and  $Tlr2^{-/-}Apoe^{-/-}$  mice  
7 sera. Although  $Apoe^{-/-}$  mice and  $Tlr2^{-/-}Apoe^{-/-}$  mice exhibited significantly higher level of  
8 serum cholesterol than that of C57 mice, no significant differences were observed between  
9 groups of  $Tlr2^{-/-}Apoe^{-/-}$  and  $Apoe^{-/-}$  mice of seven month old. C57, C57 wild type mice; AM,  
10  $Apoe^{-/-}$  male mice; ATM,  $Tlr2^{-/-}Apoe^{-/-}$  male mice; AF,  $Apoe^{-/-}$  female mice; ATF,  $Tlr2^{-/-}Apoe^{-/-}$   
11 female mice. N = 8 / group. Data were analyzed by One-way ANOVA.  $P < 0.05$  was  
12 considered significant.

13

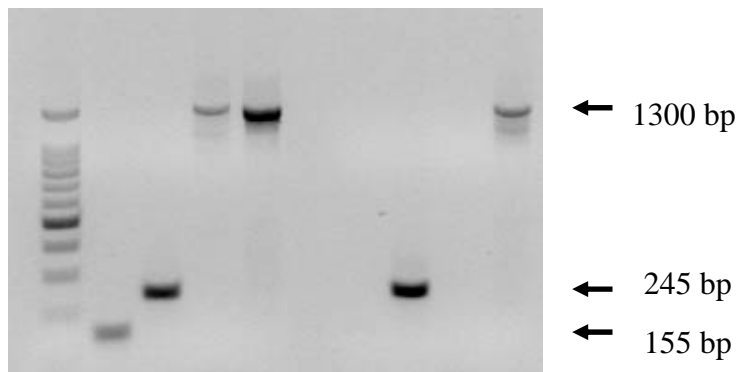
**Supplemental  
Figure 1.**

**F1-heterozygote    F3-double knockout**

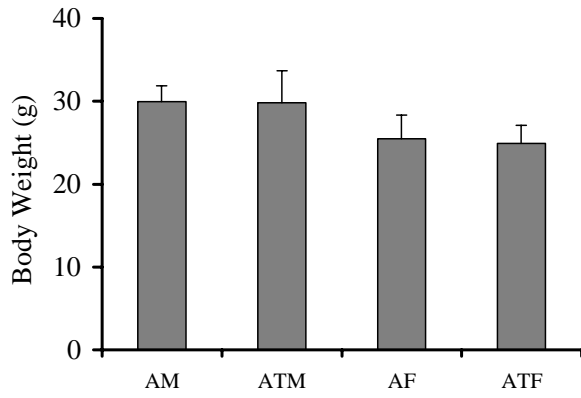
**Gene:**        apoe    tlr2        apoe    tlr2

**Primers:**    WT KO   WT KO        WT KO   WT KO

                  +    +    +    +                    -    +    -    +

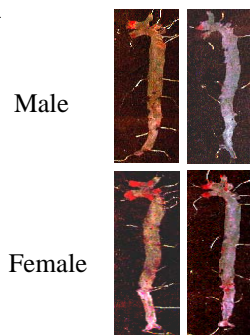


**Supplemental  
Figure 2.**

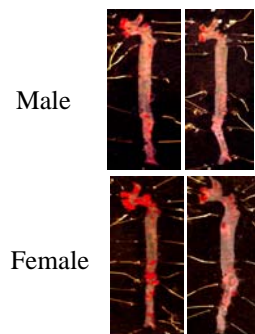


**Supplemental  
Figure 3.**

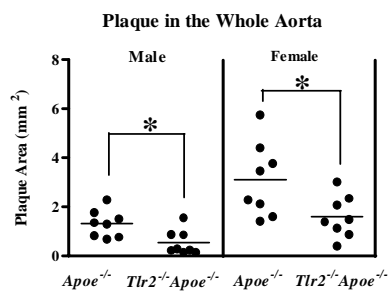
**A**



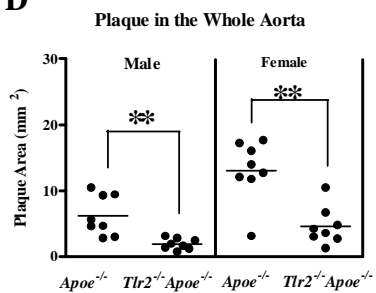
**B**



**C**



**D**



**Supplemental  
Figure 4.**

