

## **Supplemental Material**

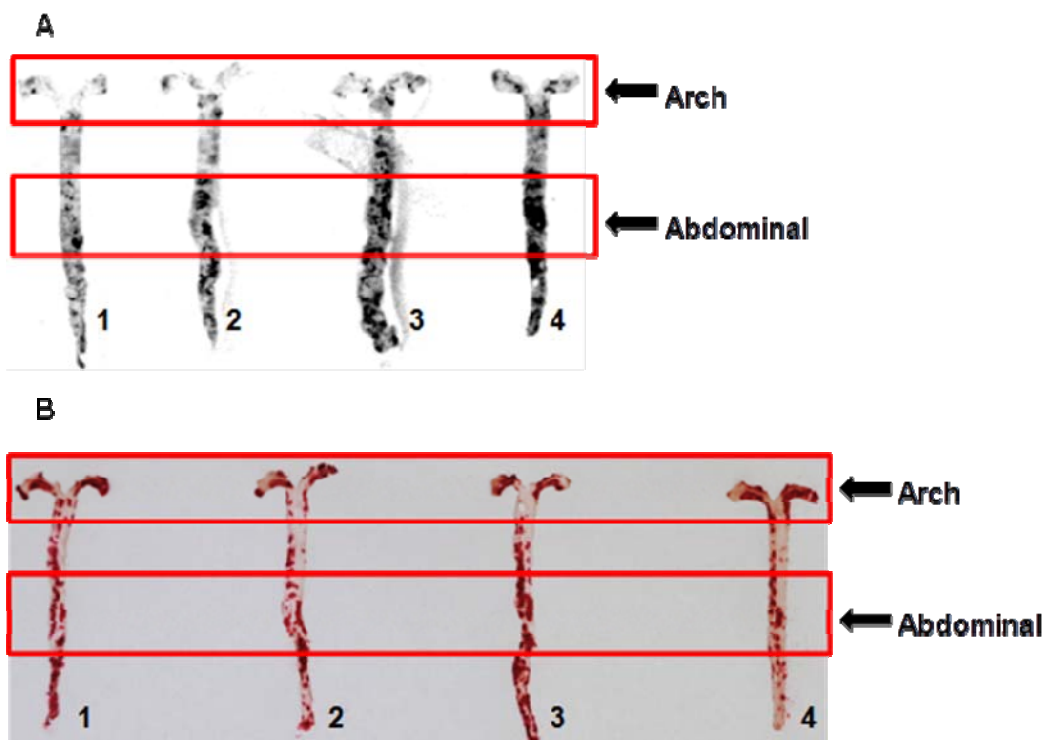
### **Autoradiography and Oil Red O Staining**

All animal experimental procedures were performed according to the guidelines of the Takeda Experimental Animal Care and Use Committee. Male ApoE knockout mice fed a high-fat diet (D12451, Research Diet, New Brunswick, USA) for 25 weeks were anaesthetized with sodium thiobutabarbital (120 mg/kg i.p.) and then intravenously injected with <sup>14</sup>C-FDG (280 kBq/mouse). Three hours after <sup>14</sup>C-FDG injections, mice were sacrificed under anesthesia and whole aorta were dissected. Excised aortas were longitudinally opened and exposed to a BAS-III imaging plate (FujiFilm, Tokyo, Japan) at -30°C for 2 days. The signals were detected by autoradiography using a FLA-7000 (FujiFilm). Following autoradiography, the aortas were fixed with 10% formalin and then stained with oil red O.

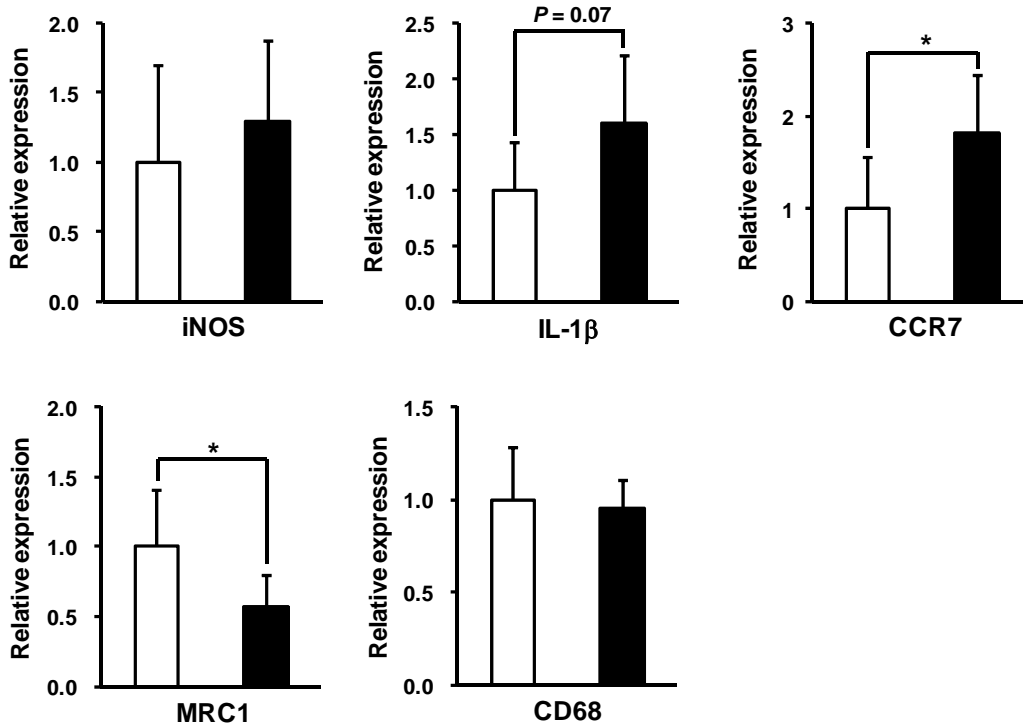
### **Gene Expression Analysis of Atherosclerotic Plaques**

All animal experimental procedures were performed according to the guidelines of the Takeda Experimental Animal Care and Use Committee. Male ApoE knockout mice fed a high-fat diet (D12451, Research Diet, New Brunswick, USA) for 25 weeks were sacrificed under anesthesia with sodium pentobarbital (55 mg/kg, i.p.) and the whole aortas were dissected after saline perfusion. The plaques in the arch and abdominal aorta were scraped off and subjected to total RNA extraction. The mRNA expression was analyzed by a real-time PCR method with the primer-probe sets of TaqMan Gene Expression Assays (Life Technologies, California, USA) for the following genes: iNOS (Mm01309902\_m1), IL-1 $\beta$  (Mm00434228\_m1), CCR7 (Mm01301785\_m1), MRC1 (Mm01329362\_m1), CD68 (Mm03047343\_m1),  $\beta$ -actin (Mm00607939\_s1).  $\beta$ -actin was

used as the internal standard gene. The relative expression level was calculated by  $\Delta\Delta\text{CT}$  methods.



Supplemental Figure 1. Autoradiography (A) and corresponding oil red O staining (B) in mouse aortas after  $^{14}\text{C}$ -FDG injections. The aortas with the same numbers indicated in the figure were obtained from the same animals.



Supplemental Figure 2. Gene expression of M1 (iNOS, IL-1 $\beta$ , CCR7), M2 (MRC1) and macrophage (CD68) markers in the aortic arch (white bar) and abdominal (black bar) plaques from ApoE knockout mice. Data are presented as mean  $\pm$  SD (N = 6). \*P < 0.05 by Student *t* test.