SUPPLEMENTAL APPENDIX

Supplemental Figure 1. Mean (\pm SEM) NF κ B concentrations by ELISA from the descending thoracic aorta of 30-week-old mice normalized to tissue weight. *p < 0.05 vs. wild-type and LDL-R^{-/-}, †p < 0.05 vs. LDL-R^{-/-} on WSD.



Supplemental Figure 2. Two examples of platelet staining on fluorescent immunohistochemistry for CD41 illustrating presence of platelets on the plaque surface as well as in the interior of the plaque in an area of necrotic core. The dashed rectangles represent the source for the zoomed images in the center panels; the right panels show CD41 alone without DAPI. Scale bar = 200 μ m. The examples shown correspond to the LDL-R^{-/-} WSD and LDL-R^{-/-} AD13^{-/-} WSD shown in Figure 4.



Supplemental Figure 3. Examples of vWF staining on fluorescent immunohistochemistry in the different strains and treatment assignments. Scale bar = $250 \ \mu m$.



Supplemental Figure 4. Histology from the descending thoracic aorta at 30 weeks of age which include quantitative measurement (mean \pm SEM) of (A) plaque area on Masson's trichrome staining; (B) plaque macrophage area by Mac2 staining; (C) Mac-2 area as a percentage of total plaque area; (D) plaque collagen area by Masson's trichrome; (E) collagen area as a percentage of total plaque area; and (F) platelet number by CD41 staining seen per aortic root section. *p < 0.05 vs. wild-type and LDL-R^{-/-}; [†]p < 0.05 vs. and LDL-R^{-/-} on WSD; [‡]p < 0.05 vs. wild-type mice.



Supplemental Figure 5. (A) Examples illustrating group-related differences in histology from the aortic root at the sinuses showing plaque area by Masson's trichrome (top row), and fluorescent immunohistochemistry for Mac-2 (bottom row), and merged bright-field and Mac-2 (center row).



	Wild-type (n = 8–9)	$LDL-R^{-/-}$ (n = 5-7)	LDL- $R^{-/-}$ + WSD (n = 5-7)	LDL- $R^{-/-}$ AD13 ^{-/-} + WSD (n = 6-9)
White blood cells $(10^3/ml)$	6.1 ± 2.7	6.5 ± 3.7	8.4 ± 2.9	8.5 ± 1.7
Red blood cells $(10^6/dl)$	10.4 ± 0.2	10.3 ± 0.5	9.6 ± 1.0	10.0 ± 0.7
Hemoglobin (g/dl)	14.8 ± 0.3	15.1 ± 0.8	14.6 ± 1.5	16.3 ± 1.3
Platelets (10 ³ /dl)	120 ± 30	133 ± 68	125 ± 32	225 ± 98
Blood urea nitrogen (mg/dl)	20 ± 4	18 ± 3	20 ± 3	21 ± 4
Creatinine (mg/dl)	nd	nd	nd	nd

Supplemental Table 1. Blood Counts and Renal and Liver Function Tests

Data are displayed as mean \pm SD. nd = nondetectable meaning levels <0.15 mg/dl in all animals.

Blood urea nitrogen and creatinine assays were performed by clinical laboratory services.

		Wild-type	LDL-R ^{-/-}	LDL-R ^{-/-} + WSD	LDL-R ^{-/-} AD13 ^{-/-} + WSD		
20 weeks of age							
	vWF	7	7	10	7		
	Platelet GPIba	7	7	10	7		
	VCAM1	8	9	8	8		
	P-selectin	8	9	8	8		
<u>30 weeks of age</u>							
	vWF	10	8	8	12		
	Platelet GPIba	10	8	8	12		
	VCAM1	9	9	9	12		
	P-selectin	9	9	9	12		

Supplemental Table 2. Number of Mice Studied by Molecular Imaging in Figure 2