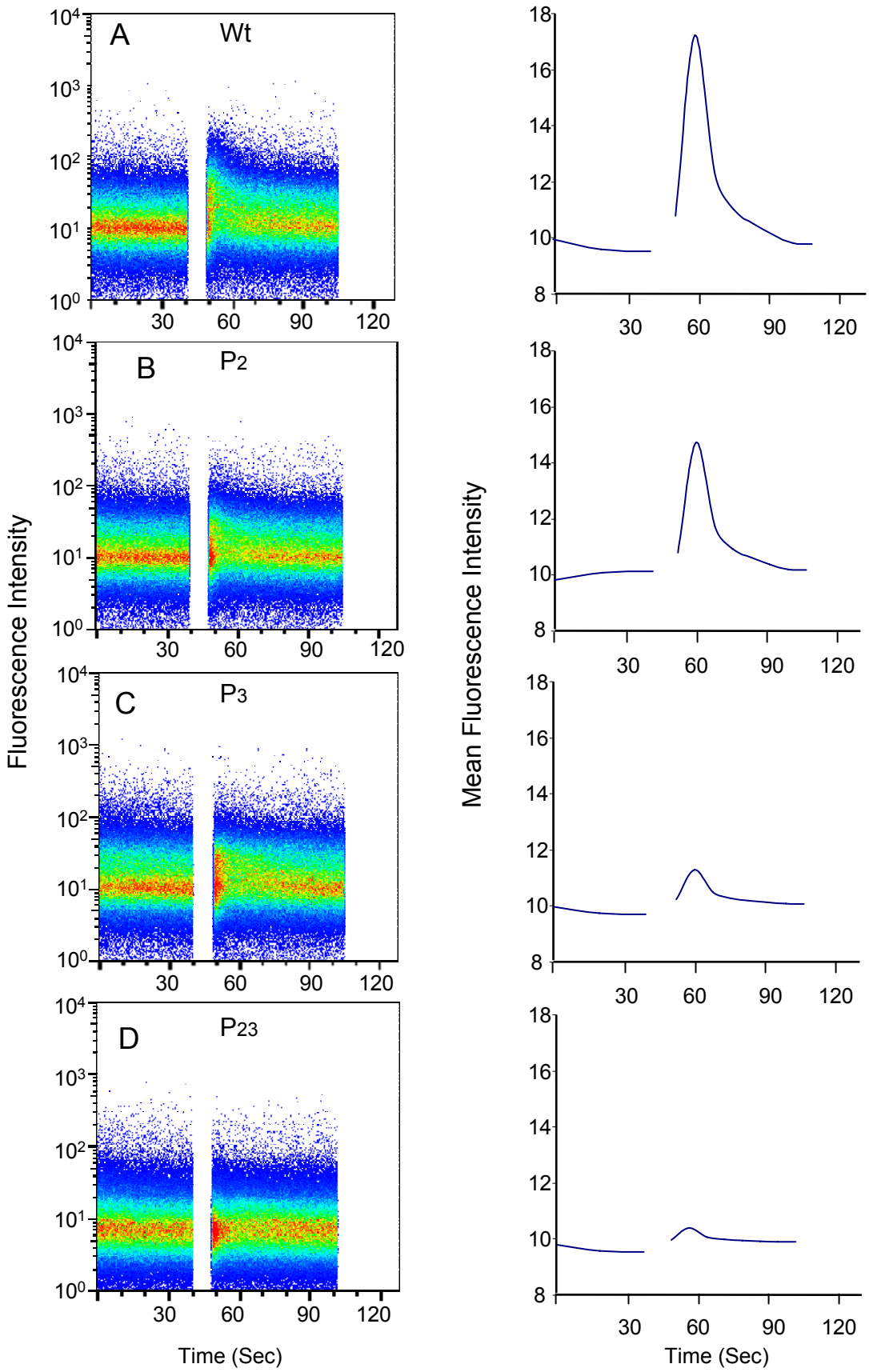
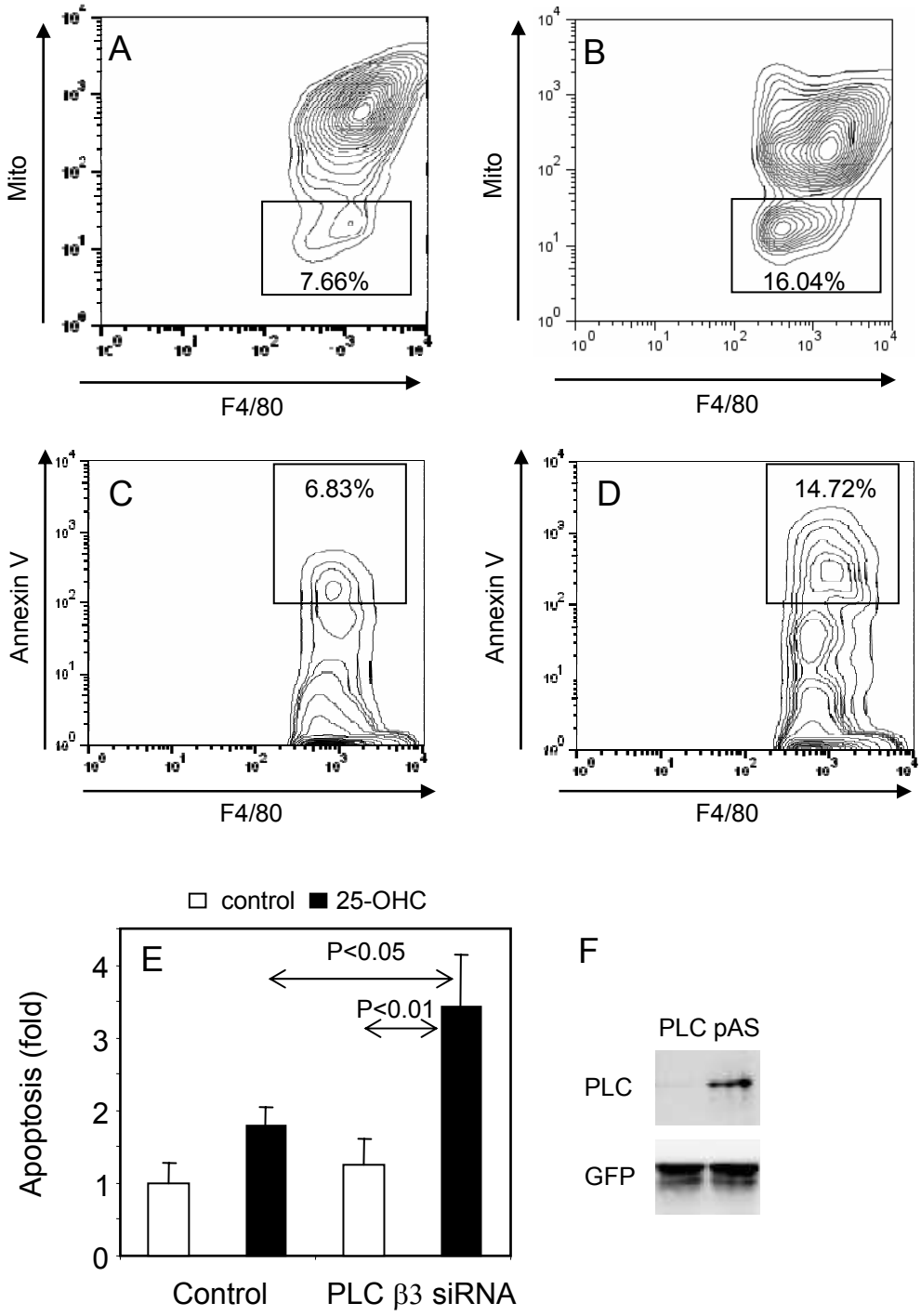
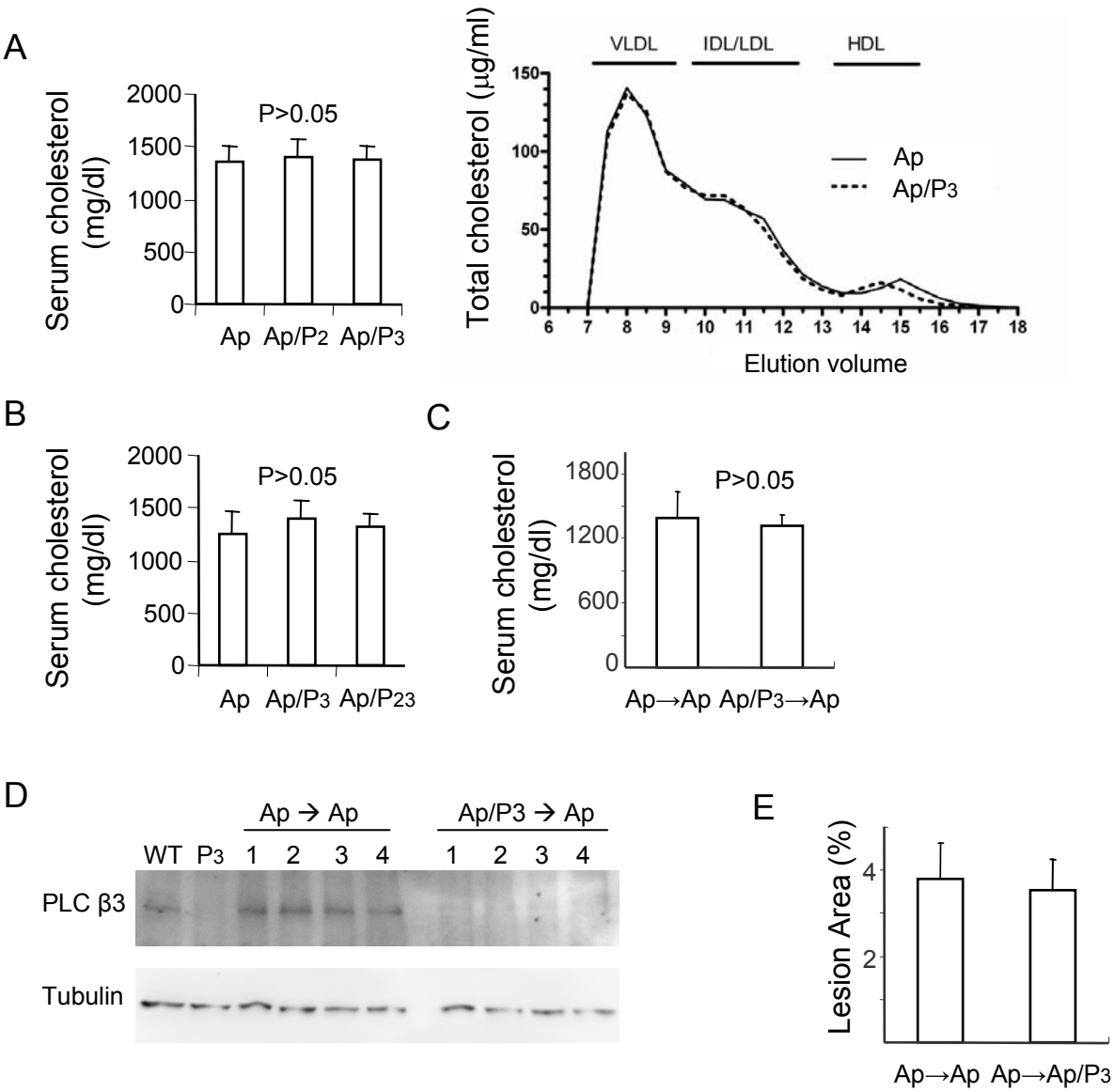
Supplementary Figure S1



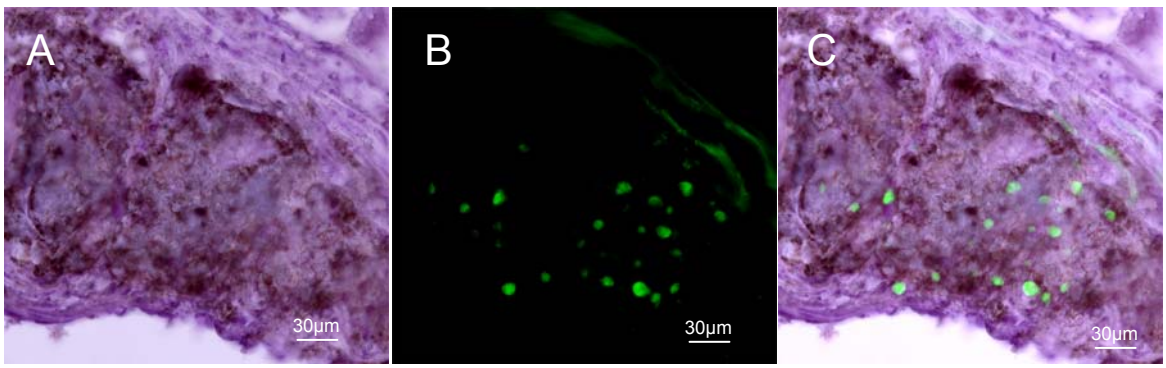
Supplementary Figure S2



Supplementary Figure S3



Supplementary Figure S4



Moma-2 TUNEL Overlay

SUPPLEMENTARY FIGURE LEGENDS:

Figure S1. Flow cytometric analysis of intracellular calcium levels of cells labeled with Fluo-3. Panels **A**-**D** are the raw flow cytometric data. From these data, the mean fluorescent intensity (MFI) in one second was calculated by the flowcytometry software FlowJo, which is shown in **E**-**H**. The differences between the peak MFI and basal MFI are shown in Fig. 1A, and the one for wildtype macrophages is taken as 100%.

Figure S2. Representative flow cytometry charts and effect of PLC β3 expression on RAW264.7 cell apoptosis. **A**-**D**) Representative flow cytometry charts for Fig 2B **(A** & **B)** and for Fig. 2C (**C** and **D)**. **E**) RAW264.7 Cells were transfected with a control plasmid or a plasmid expressing PLC β3 siRNA, both of which also express GFP. Cells were treated with 30 ug/ml OHC, stained with the Mito-Probe dye, and analyzed by FACS 48 hours after transfection. GFP-positive cells were gated for apoptosis analysis. **F**) Cells were cotransfected with PLC β3 siRNA expressing or control vector and PLC β3 cDNA for two days. The levels of PLC β3 were detected by Western analysis using an anti-PLC β3 antibody.

Figure S3. Lipid profiling and additional data for adoptive bone marrow transfer experiments. **A**-**C)** Lipid profiles for mice described in Fig. 1**C**, **E**, & **F**, respectively. A representative chromatogram for FPLC analysis lipid profile is shown In **A**. **D**) Bone marrow cells from a wildtype, a PLC β3-null, or mice receiving apoE-null or ApoE/PLC β3-null bone marrows were analyzed by Western blotting using an anti-PLC β3 antibody.

B-tubulin was detected as an internal control. **E**) Quantification of atherosclerotic lesions of apoE-null and apoE/PLC β3-null mice (n=7) receiving bone marrows from ApoE-null fed on HFD for 14 weeks were analyzed for lesion areas by *en Face* staining of aortas.

Figure S4. Magnified images of TUNEL and Moma-2 staining of two adjacent sections from PLC β3-null mice. Panel A was also counterstained with Hematoxylin.