

Supplementary Materials: The following are available online at www.mdpi.com/xxx/s1,

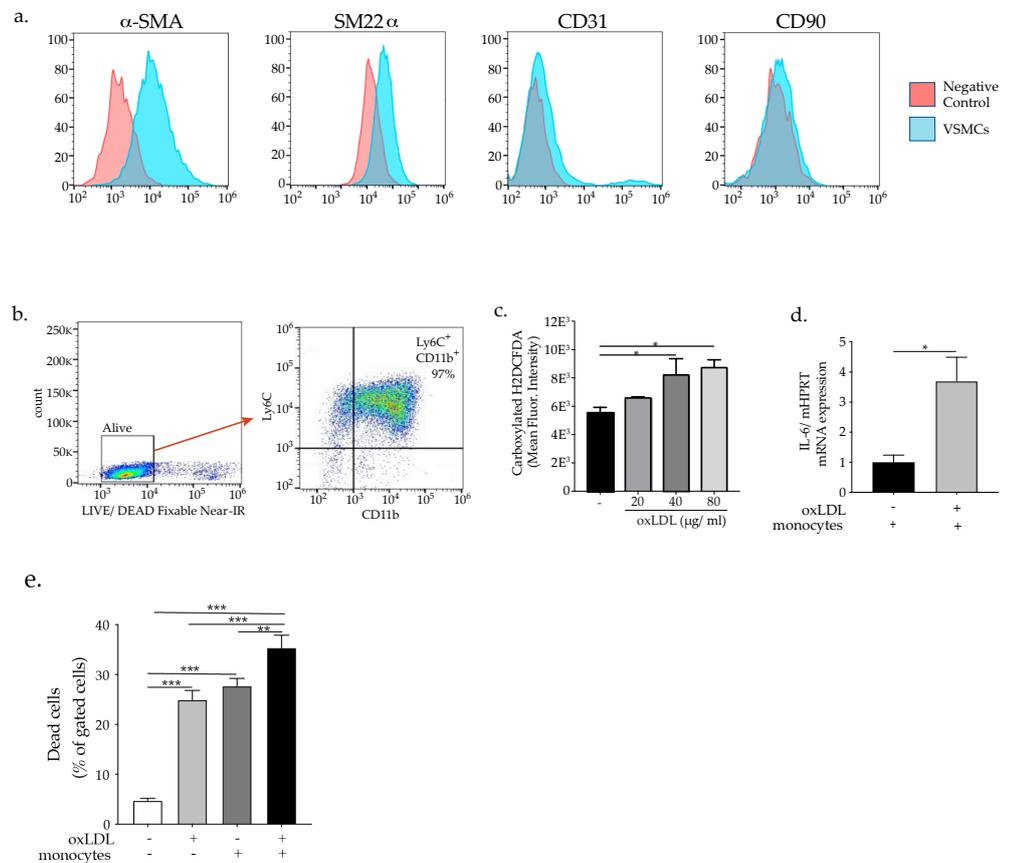


Figure S1: (a) Histograms represent the express of VSMC-specific markers α -SMA, SM22 α , and negative expression of endothelial cells marker CD31 and fibroblast marker CD90 in the isolated mouse VSMC. (b) Mouse monocytes purity check-up. (c) Dose dependent ROS production in oxLDL-activated monocytes. Graph bars represent the mean \pm SEM of mean fluorescent intensity of carboxylated H2DCFDA mouse monocytes with $n = 6$ /group and $*p < 0.05$, One-way ANOVA. (d) Graph bars represent the mean \pm SEM of mRNA expression of IL-6 in monocytes or oxLDL-activated monocytes, as indicated, with $n = 6$ /group and $*p < 0.05$, unpaired t-test. (e) Graph bars represent the mean \pm SEM of Propidium Iodide/7-AAD expressing VSMCs as a percentage of gated VSMCs as indicated, with $n = 6$ /group, $**p < 0.01$, $***p < 0.001$, One-way ANOVA.

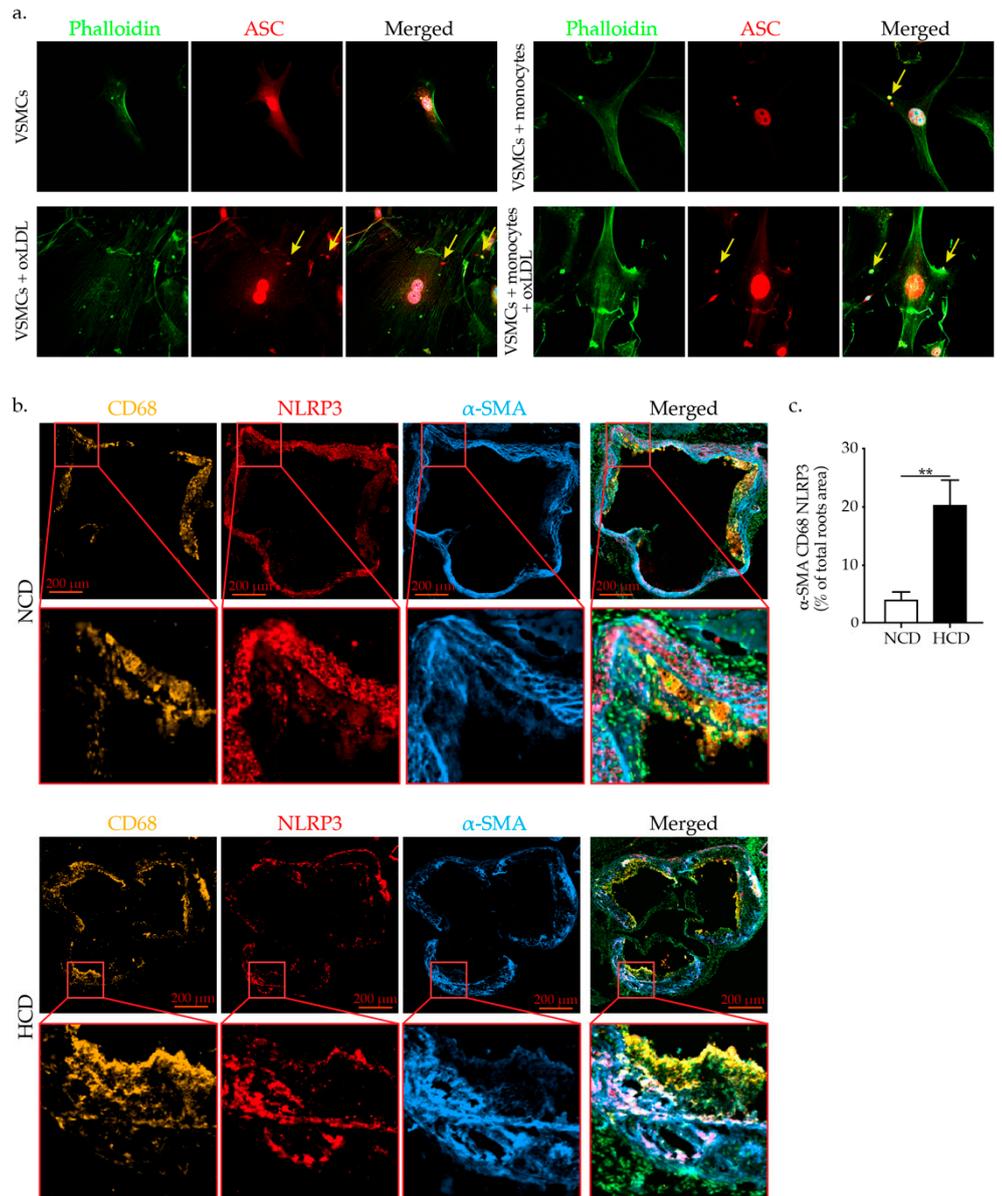


Figure S2: (a) NLRP3 Inflammasome Activation in VSMCs. (a) ASC speck formation (yellow arrow) by confocal microscopy (LSM 800 Airyscan) and immunofluorescence imaging in VSMCs treated with oxLDLs or co-cultured with monocytes or oxLDL-activated monocytes. (b) CD68, NLRP3, α -SMA in the aortic roots of *Apoe*^{-/-} mice fed NCD or HCD. (c) Graph bars show the mean \pm SEM of CD68, NLRP3, α -SMA co-expression in the aortic roots plaques of *Apoe*^{-/-} mice fed NCD or HCD, n=8/group and **p < 0.01, unpaired t-test.