

**Supplementary Figure 7.** Contribution of cholesterol accumulation on endosome-to-lysosome transition in lamp-1<sup>-/-</sup>/lamp-2<sup>-/-</sup> fibroblasts. Wildtype (**A-D**) and lamp-1<sup>-/-</sup>/lamp-2<sup>-/-</sup> cells (**E-L**) were either maintained in standard culture conditions (labeled *untreated*; **A-H**) or cultured in 10% LPDS with 2 μg/ml mevastatin for 24 h (*treated*; **I-L**). The fibroblasts were then pulsed with 250 μg/ml of tetramethylrhodamine-dextran overnight and chased in dye-free medium for 1 h. Finally, late endosomes/lysosomes were labeled with LysoTracker green. Images were acquired using laser scanning confocal microscopy. Cholesterol content was visualized using 1mg/ml filipin (**A,E** and **I**). The green fluorescence of LysoTracker is shown in (**B,F** and **J**). The red fluorescence of tetramethylrhodamine-dextran is shown in (**C,G** and **K**). Overlays of green and red fluorescence shown in (**D,H** and **L**). Numbers in **D,H** and **L** are Pearson's colocalization coefficients for the displayed image.