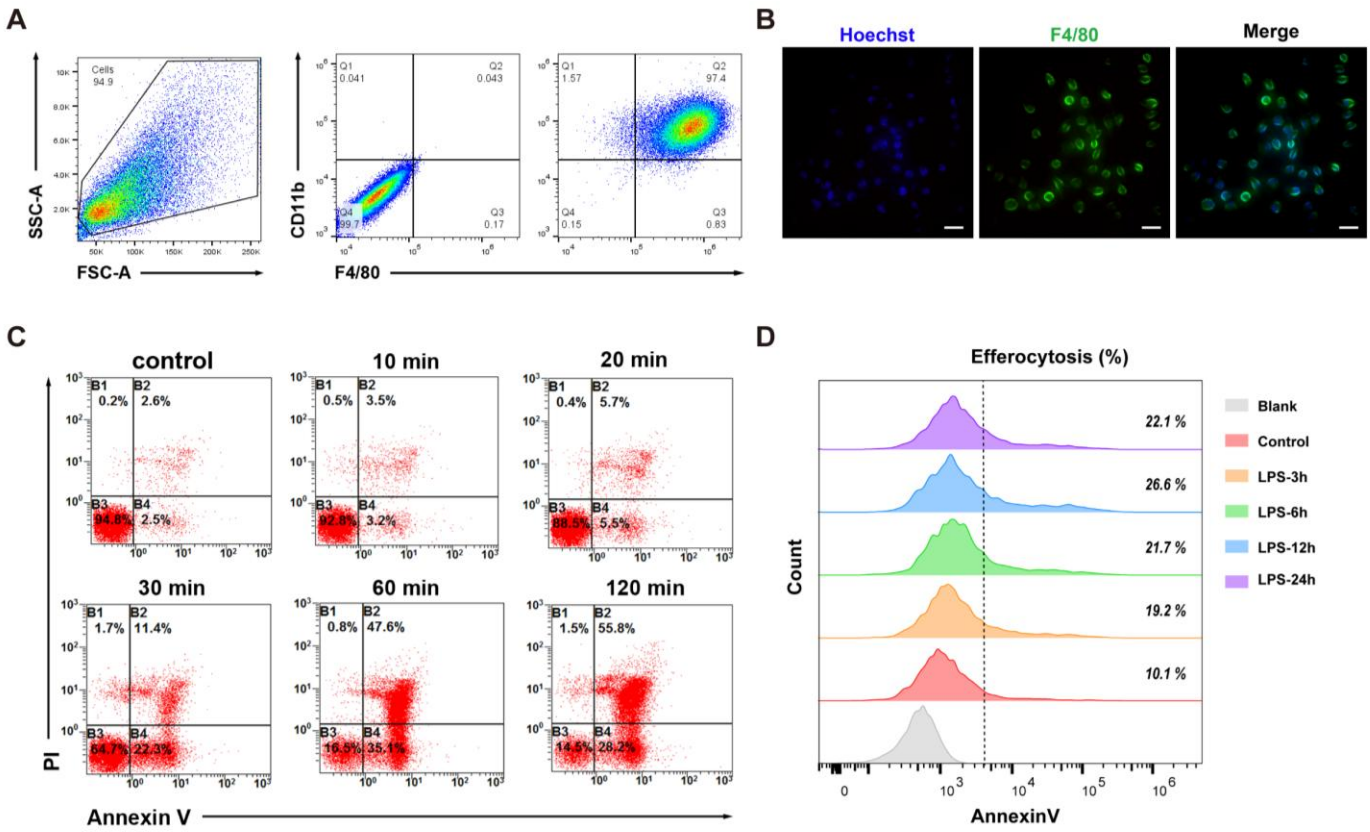
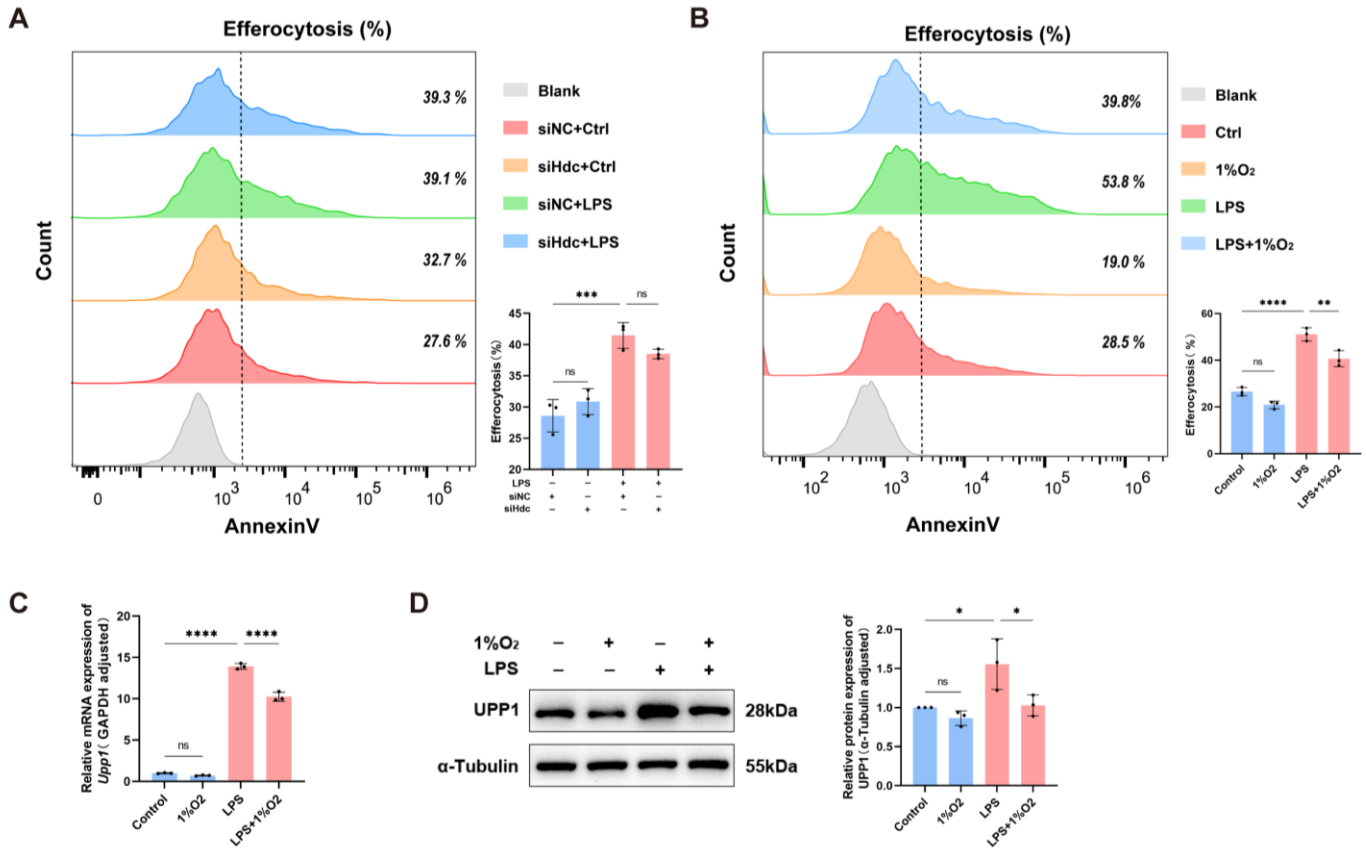
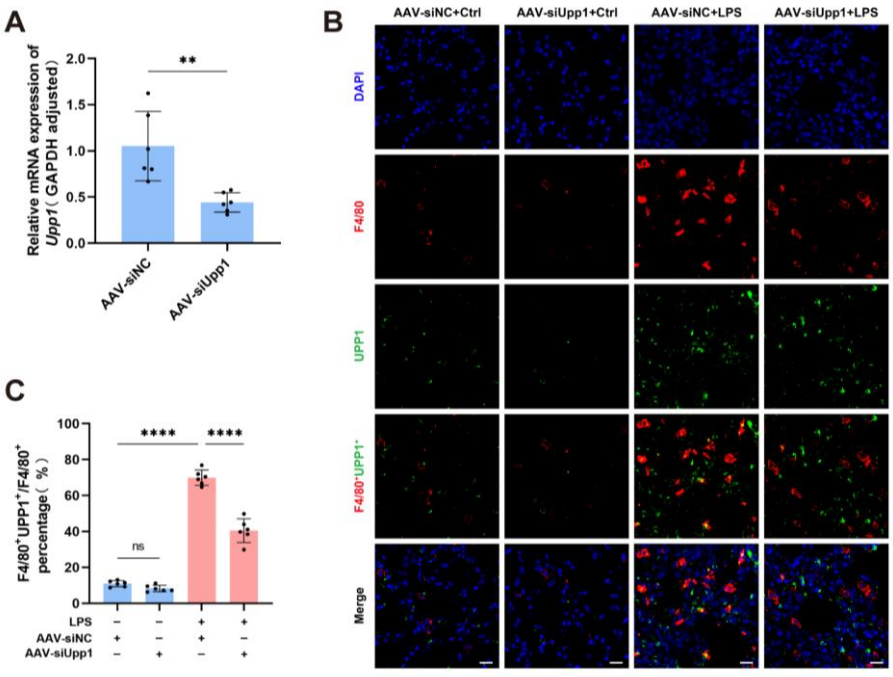


Supplement Figure 1. Contribution of the efferocytosis in vitro model. (A) Flow cytometry analysis of appraisal of BMDMs isolated from 6-8 weeks old mice and differential cultured for 7 days. (B) Immunofluorescence analysis of appraisal of BMDMs. Scale bar: 20μm. (C) Flow cytometry analysis of apoptosis of Jurkat T cells irradiated with UVC for 10 min, 20 min, 30 min, 60 min, and 120min. (D) Flow cytometry analysis of efferocytosis. F4/80-FITC-labeled BMDMs pre-treated with 1 μg/mL LPS for 3, 6, 12, and 24 h, were incubated with AnnexinV-APC-labeled Jurkat-ACs for 90 min. $F4/80^{+}AnnexinV^{+}$cells are considered BMDMs that engulf ACs, and their proportion in $F4/80^{+}$ cells is considered as the percentage of efferocytosis events. Data represent the mean ± SD. n = 3, *n.s.*, not significant, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$, **** $p < 0.0001$.

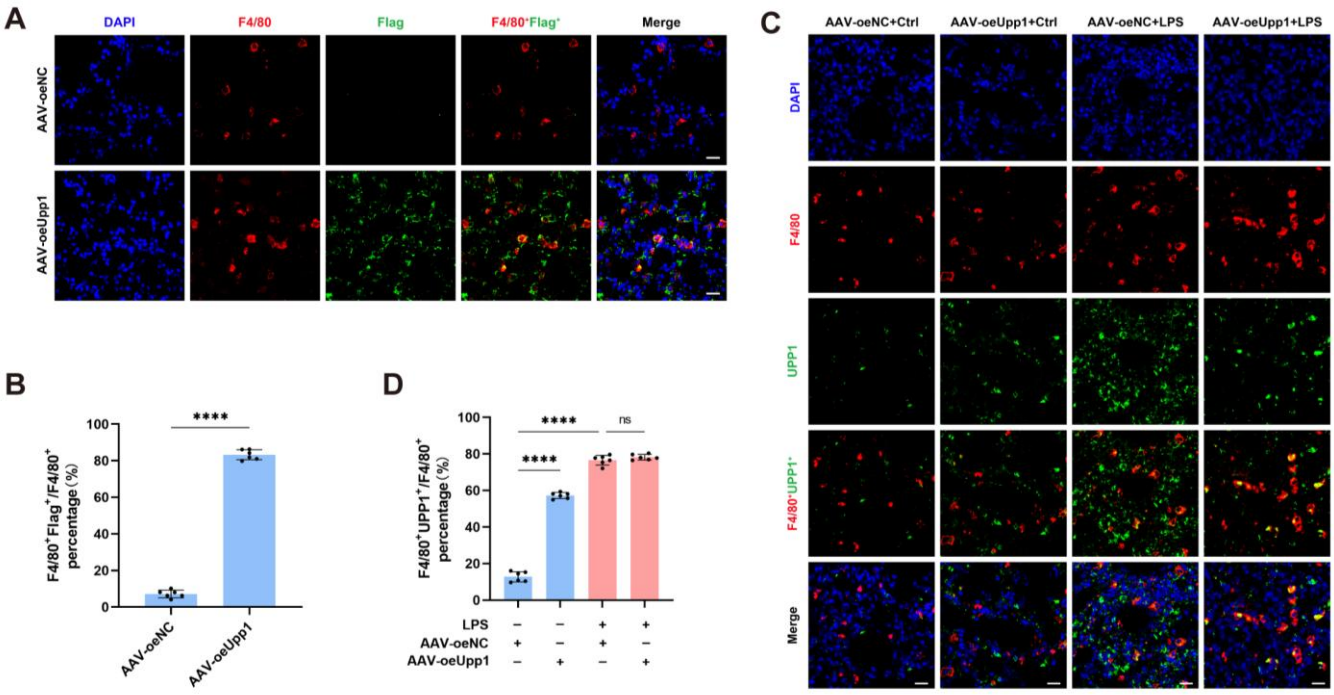


Supplement Figure 2. (A) Flow cytometry analysis of efferocytosis in MH-S cells with *Hdc* knockdown. (B) Flow cytometry analysis of efferocytosis in MH-S cells with the condition simulating the hypoxic environment of ALI/ARDS *in vivo*. (C) RT-qPCR analysis of the mRNA levels of *Upp1* in MH-S cells with the condition simulating the hypoxic environment of ALI/ARDS *in vivo*. (D) Western-blot analysis of the protein levels of UPP1 with the condition simulating the hypoxic environment of ALI/ARDS *in vivo*. Data represent the mean ± SD. n = 3, *n.s.*, not significant, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$, **** $p < 0.0001$.



Supplement Figure 3. (A) RT-qPCR analysis of *Upp1* in the precipitation of BALF. (B-C) Representative images and quantification of dual

immunofluorescence staining for F4/80 (red) and UPP1 (green) in lung tissues. Scale bar: 20 μm. Statistical analysis was performed. Data represent the mean ± SD. n = 6, *n.s.*, not significant, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$, **** $p < 0.0001$.



Supplement Figure 4. (A-B) Representative images and quantification of dual immunofluorescence staining for F4/80 (red) and flag (green) in lung tissues. (C-D) Representative images and quantification of dual immunofluorescence staining for F4/80 (red) and UPP1 (green) in lung tissues. Scale bar: 20 μm. Statistical analysis was performed. Data represent the mean ± SD. n = 6, *n.s.*, not significant, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$, **** $p < 0.0001$.