SUPPLEMENTARY FIGURES



Supplementary Figure 1. Apoptosis did not occur during activation of hepatic stellate cells. LX-2 cells were treated with 100 μ M CoCl₂ or 2 μ g/ml LPS for 8 h. (A) Cells were collected and stained with Annexin V-FITC/PI apoptosis double staining kit. Apoptosis was analyzed with FACS. Annexin V+/PI- cells were recorded as early apoptotic cells and Annexin V+/PI+ cells were recorded as late apoptotic cells to calculate the percentage of apoptotic cells. Densitometric analysis was performed and data were expressed as mean \pm SD. (B) Cell lysates were subjected to detect caspase 3 and cytochrome C with Western blot. Densitometric analysis was performed and data were expressed as mean \pm SD. n.s.: not significant.



Supplementary Figure 2. Interference of Bnip3 expression inhibited the activation of hepatic stellate cells. LX-2 cells were stimulated by 100 μ M CoCl₂ (**A**) or 2 μ g/ml LPS (**B**), either alone or after *Bnip3* siRNA transfection. Cells were collected at 48 h post transfection and the expression of Bnip3 and α -SMA was detected by Western blot. (**C**) Primary HSCs were isolated from mice and cultivated in vitro. Cells were transfected with specific siRNA targeting *Bnip3* as cells were cultivated up to Day 3 and the expressions of Bnip3 and α -SMA were detected by Western blot. Densitometric analysis was performed and data were expressed as mean ± SD, *P < 0.05, **P < 0.01.



Supplementary Figure 3. Inhibition of vimentin re-organization inhibited Bnip3 expression and autophagy in hypoxia or LPS stimulated LX-2 cells. LX-2 cells were stimulated by 100 μ M CoCl₂ or 2 μ g/ml LPS either alone or after Withaferin A (1.0 μ M) pre-treatment and the expression of vimentin, Bnip3 and LC3B was detected by Western blot. Densitometric analysis was performed and data were expressed as mean ± SD, **P* < 0.05, ***P* < 0.01.