Figure S1. Glycolysis-induced lactate decreases autophagy via the SIRT3/AMPK pathway in HK-2 cells. A total of $1x10^6$ HK-2 cells were treated with the indicated doses of LPS, lactate, and LPS+lactate for 12 h at 37° C in 5% CO₂. (A-E) Immunoblot analysis of LC3-I/II, p62, p-AMPK/AMPK and SIRT3 in HK-2 cells stimulated with LPS (1 μ g/ml) in the presence/absence of lactate (25 μ M). n=3-4 samples per group. The data are presented as the means \pm SEM. *P<0.05 vs. the indicated groups. SIRT3, sirtuin 3; AMPK, AMP-activated protein kinase; LPS, lipopolysaccharides; p-phosphorylated.

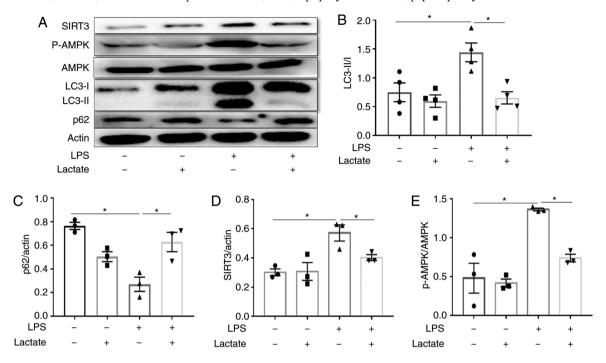


Figure S2. 2-DG-induced protective effects against sepsis-induced AKI depend on regulating autophagy in HK-2 cells. A total of 1×10^6 HK-2 cells were treated with the indicated doses of LPS, 2-DG, LPS+2-DG, and LPS+2-DG+3-MA for 12 h at 37°C in 5% CO₂. (A and B). Immunoblot analysis and quantification of LC3-I/II in HK-2 cells stimulated with LPS (1 μ g/ml) for 12 h pretreated without or with 2-DG (2 mM, before 3 h) and/or 3-MA (5 mM, before 1 h). n=3 experiments. (C and D). The apoptosis of HK-2 cells stimulated with LPS (1 μ g/ml) for 12 h pretreated without or with 2-DG (2 mM, before 3 h) and/or 3-MA (5 mM, before 1 h) were measured by flow cytometry. n=3 experiments. Data are presented as the means \pm SEM. *P<0.05, **P<0.01 vs. the indicated groups. 2-DG, 2-deoxy-D-glucose; AKI, acute kidney injury; LPS, lipopolysaccharides; 3-MA, 3-methyladenine.

