

Supplementary information

FIGURE LEGENDS

FIGURE S1 | Akt-mTOR pathway was involved in activation of autophagy induced by serum starvation. Western blot was used to determine the relative expression of p-Akt, p-mTOR, LC3-II/I and p-p70S6K in bEnd.3 monolayer under starvation for the indicated time. Data are provided as the mean \pm SEM. * P < 0.05, ** P < 0.01, comparing with the control group.

FIGURE S2 | Autophagy was activated under starvation and played a protective role in the integrity of endothelial cell barrier formed by hCMEC/D3. (A) Localization of LC3 and Cldn5 was measured by immunofluorescence staining. Cldn5 aggregated in cytosol and autophagy mediated its clearance (white arrow heads). (B) Autophagy played a role in reducing the paracellular permeability under starvation. 3-MA, 3-methyladenine; Rapa, rapamycin. Data are provided as the mean \pm SEM. * P < 0.05, ** P < 0.01. Scale bar: 10 μ m.