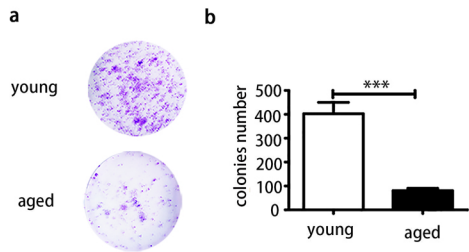
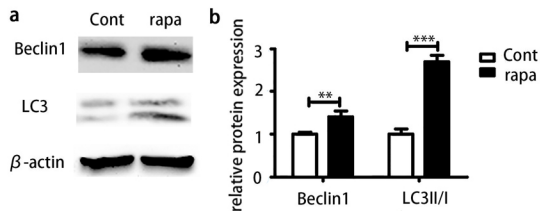


Supplementary Fig.1



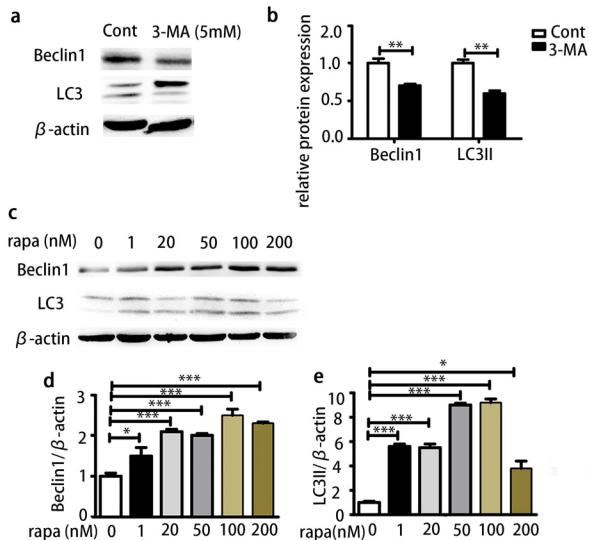
Aged BMMSCs presented reduced self-renewal capacity. (a, b) CFU staining of young and aged BMMSCs.

Supplementary Fig.3



(a, b) BMMSCs from rapamycin-treated mice exhibited increased autophagy than control group by western blot.

Supplementary Fig.2



(a, b) 5mM 3-MA could reduce autophagy effectively. (c-e) 100 nM rapamycin could increase autophagy mostly.