

Figure S1. Effects of cyclic mechanical tension on autophagy in NP cells within 6 h. (A) Representative western blot images and (B) quantification of LC-3 II in NP cells subjected to cyclic mechanical tension for 2, 4 and 6 h. The control comprised NP cells that were kept static. * $P < 0.05$. Error bars represent the standard error. NP, nucleus pulposus; LC3, microtubule-associated protein light chain 3; GAPDH, glyceraldehyde3-phosphate dehydrogenase.

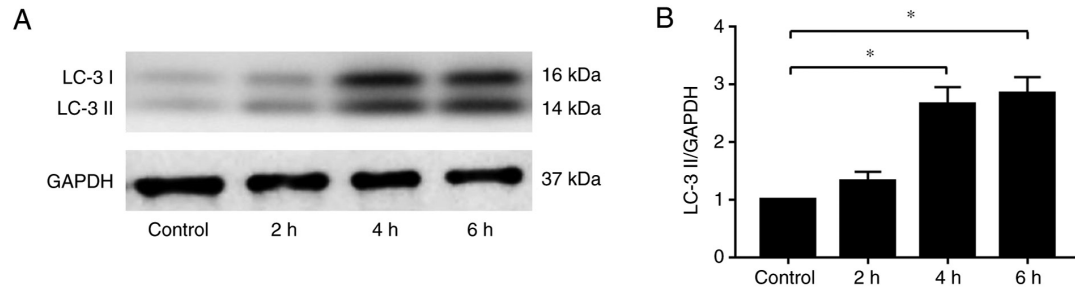


Figure S2. Effects of autophagy inhibitor 3-MA on intracellular ROS of nucleus pulposus cells subjected to CMT for 6 h. The level of intracellular ROS was detected by flow cytometry using 2',7'-dichlorodihydrofluorescein diacetate. The control comprised NP cells that were kept static. * $P < 0.05$. Error bars represent the standard error. NP, nucleus pulposus; ROS, reactive oxygen species; MFI, mean fluorescence intensity; CMT, cyclic mechanical tension.

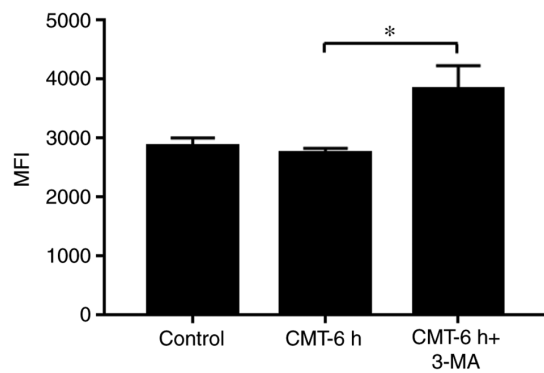


Figure S3. Effects of autophagy inhibitor 3-MA on cell apoptosis of NP cells subjected to CMT for 6 h. (A) Representative graph of cell apoptosis obtained by flow cytometry following double-labeling with Annexin V/7-AAD. (B) Statistical analysis of the apoptotic rates. (C) Representative western blot images and (D) quantification of cleaved caspase-3 in NP cells subjected to CMT. The control comprised NP cells that were kept static. * $P < 0.05$. Error bars represent standard error. NP, nucleus pulposus; CMT, cyclic mechanical tension; 7-AAD, 7-amino-actinomycin D; FITC, fluorescein isothiocyanate; GAPDH, glyceraldehyde3-phosphate dehydrogenase.

