**SIRT1 Inhibits High Shear Stress-Induced Apoptosis in Rat** 

**Cortical Neurons** W<sub>EI</sub>S<sub>ONG</sub><sup>1,2</sup>, M<sub>EI</sub>-L<sub>I</sub>Liu<sup>1,2</sup>, Z<sub>HI</sub>-J<sub>UN</sub> Z<sub>HAO</sub><sup>1,2</sup>, C<sub>HONG</sub>-Q<sub>UAN</sub> H<sub>UANG</sub><sup>1,2</sup>, J<sub>UN</sub>-W<sub>EI</sub> X<sub>U</sub><sup>1,2</sup>, A<sub>N</sub>-Q<sub>ING</sub> W<sub>ANG</sub><sup>1,2</sup>,  $P_{ING} L_I^{1,2}$  and  $Y_U$ - $B_0 F_{AN}^{1,2,3}$ 1Key Laboratory for Biomechanics and Mechanobiology of Ministry of Education, School of Biological Science and Medical Engineering, Beihang University, Beijing 100191, China 2Beijing Advanced Innovation Centre for Biomedical Engineering, Beihang University, Beijing 100191, China 3 National Research Center for Rehabilitation Technical Aids, Beijing 100176, China Abbreviated title: SIRT1 Inhibits HSS-Induced Apoptosis in Neurons Address correspondence to Ping Li and Yu-Bo Fan, Key Laboratory for Biomechanics and Mechanobiology of Ministry of Education; School of Biological Science and Medical Engineering, Beihang University. Electronic mail: liping@buaa.edu.cn and yubofan@buaa.edu.cn TEL and FAX: Tel: +86-10-82339428 Wei Song and Mei-Li Liu have contributed equally to this work.