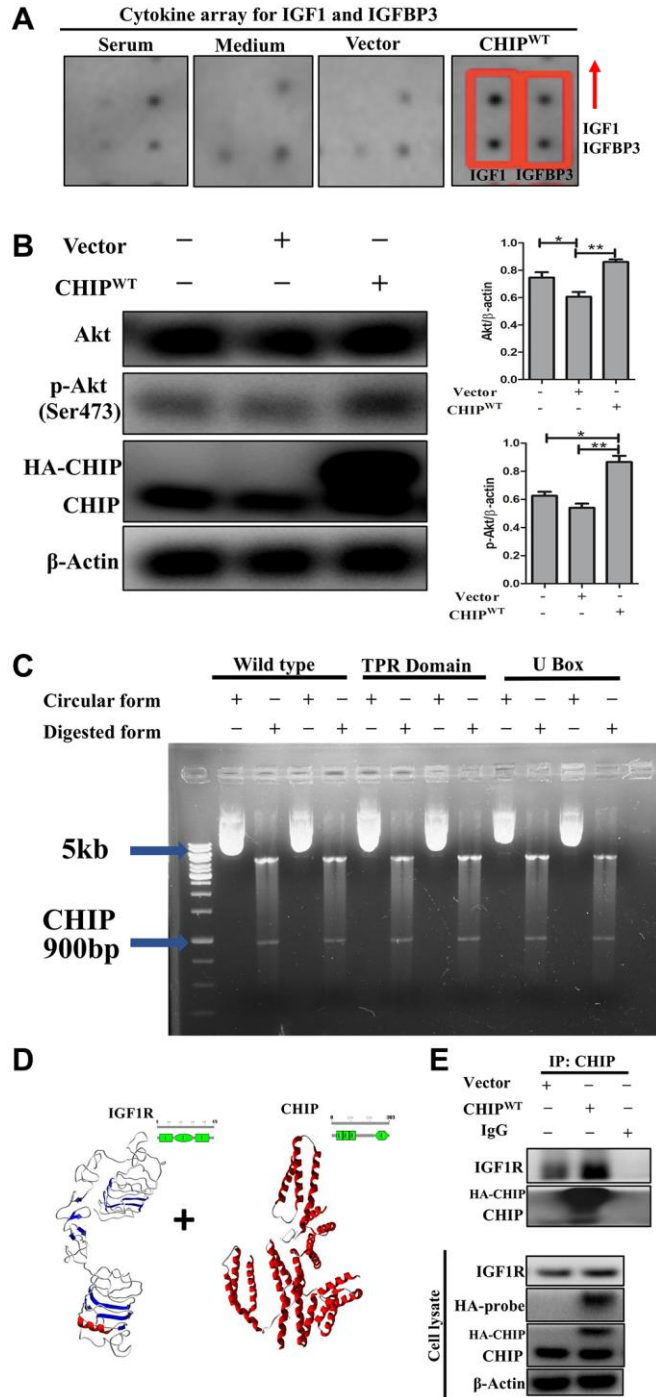
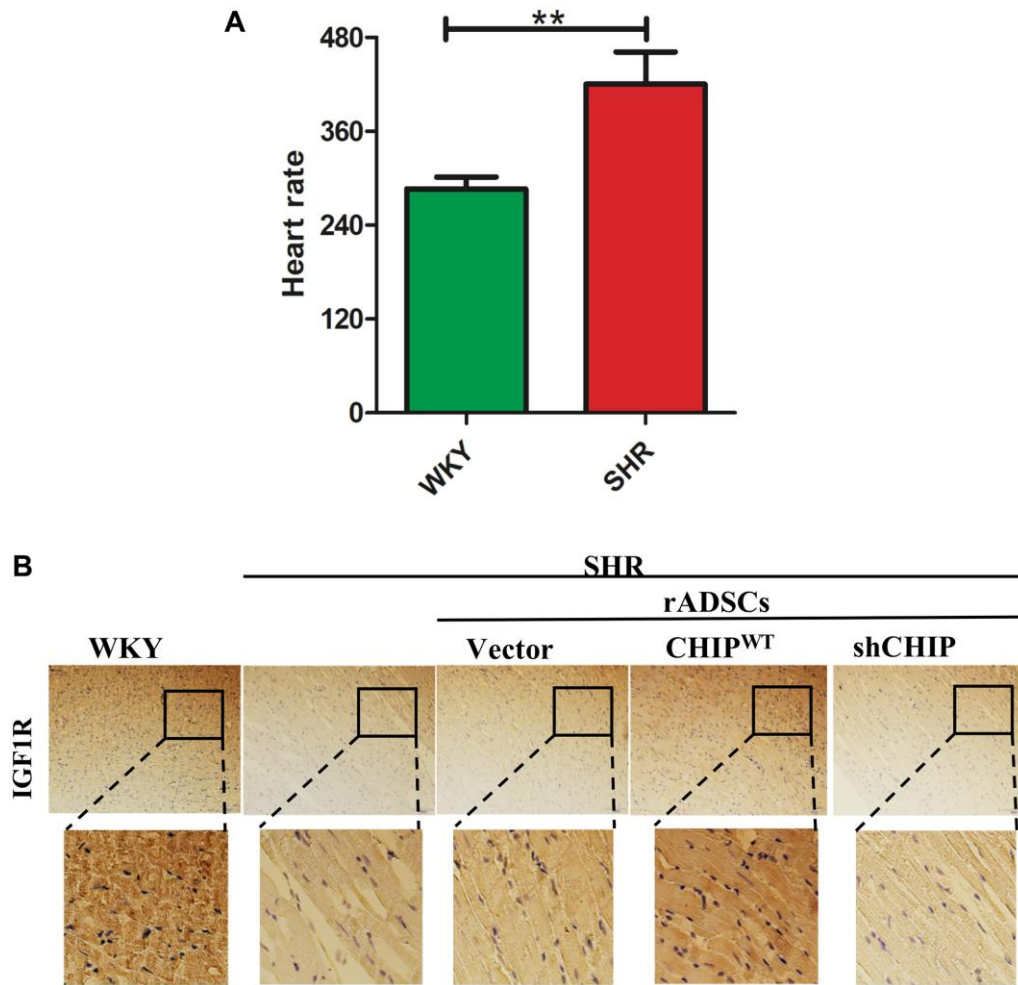


SUPPLEMENTARY FIGURES



**Supplementary Figure 1. Effects of CHIP overexpression on IGF1 secretion, size confirmation of wild-type and mutant forms, the PDB structure of IGF1R and CHIP co-chaperone.** (A) Cytokine array to determine the secretion level of IGF1 and IGFBP3 in the medium of different treatment groups. (B) The immunoblot data indicated AKT and pAKT expression levels after overexpression of HA-vector/HA-CHIP wild-type for 24 h in rADSCs. Values represent as mean  $\pm$  SEM ( $N = 3$ ; \* $p < 0.05$ ; \*\* $p < 0.01$  indicate significant differences). (C) The agarose gel electrophoresis data showed the CHIP plasmid enzymatic digestion of wild-type and two mutant forms. (D) The PDB structures of IGF1R and CHIP protein. (E) Co-IP was done by transfection of HA-vector/HA-CHIP wild-type for 24 h and measured by immunoblotting.



**Supplementary Figure 2. Heart rate analysis and IGF1R immunohistochemistry of WKY, SHR and SHR-treated groups.** (A) Heart rate analysis was performed by tail-cuff method for the WKY and SHR rats before treatment. Values represent as mean  $\pm$  SEM ( $N = 7$ ; \* $p < 0.05$ ; \*\* $p < 0.01$  indicate significant differences). (B) Immunohistochemistry for IGF1R expression of different experimental groups.