

**Figure S1** Graphical abstract. Dehydroepiandrosterone (DHEA) can reduce Wisp2/PPAR $\gamma$  expression and thereby activate NF- $\kappa$ B/ TGF- $\beta$ 1/Smad2/3 signaling pathway and elevate Collagen I,  $\alpha$ -SMA, CTGF expression to promote fibrosis of ovarian granulosa cells. Rhamnocitrin (Rha) can improve fibrosis of ovarian granulosa cells via alleviate the influence of DHEA on Wisp2/PPAR $\gamma$  and downstream related-protein expression. Wisp2 overexpression (OE-Wisp2) had similar effect of Rha, while Wisp2 silence (sh-Wisp2) had opposite effect of Rha.