

Supplemental 1 the siRNA screening protocol in detail and the results

To study whether changes in *BAD* expression levels could affect gonadal steroid secretion levels, which are essential for follicular growth and atresia during the estrous cycle, RNAi was performed on primary GCs. First of all, the 3 *BAD*-siRNA molecules were transfected in the follicle GCs cultured in the experiment. The result, as shown in Figure 1, the interference efficiency of siRNA was high. The interference efficiency of *BAD*-siRNA001, 002 and 003 were 92%, 96% and 95%, respectively, when the transfection concentration of siRNA was 30 nM; when siRNA transfection concentration was 50 nM, the interference efficiency of *BAD*-siRNA001, 002 and 003 were 93%, 97% and 90%, respectively. *BAD*-siRNA002 was selected as an interfering molecule to transfect granulosa cells, and the transfection concentration of siRNA was 30 nM.

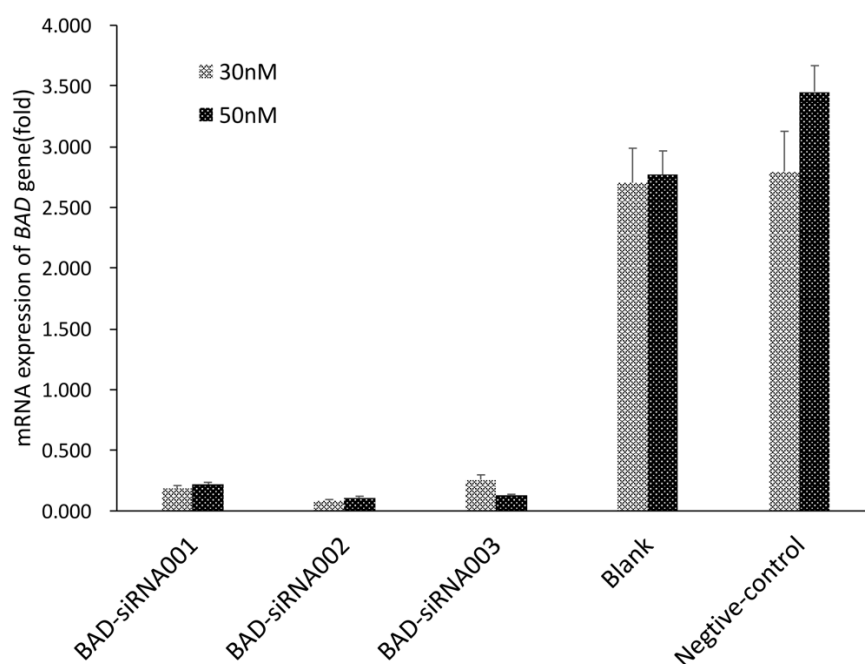


Figure 1 real-time PCR detected the interference efficiency of *BAD*-siRNA001, 002 and 003 at 30nM and 50nM in vitro