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LncRNA-m18as1 competitively binds with miR-18a-5p to regulate follicle-stimulating hormone secretion through the Smad2/3 pathway in rat primary pituitary cells

Key words: lncRNA; miRNA; ceRNA; FSH; Smad2/3

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Research Summary

Both lncRNAs and miRNAs are non-coding RNAs that play important role in transcriptional and post-transcriptional regulation, and are involved in various life processes including metabolism, reproduction, hormone secretion, and disease occurrence.

This study focused on the regulation of the lncRNA-miRNA-mRNA axis on FSH synthesis and secretion

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Innovation points

- **A new lncRNA was screened and finally named lncRNA-m18as1 according to its function.**

- **LncRNA-m18as1 promotes FSH synthesis and secretion**

- **LncRNA-m18as1 competes with miR-18a-5p to regulate the expression of Smad2 protein, thereby regulating FSH synthesis and secretion, emphasizing the promoting effect of the LncRNA-m18as1/MiR-18a-5p/Smad2/3 axis on FSH synthesis and secretion**

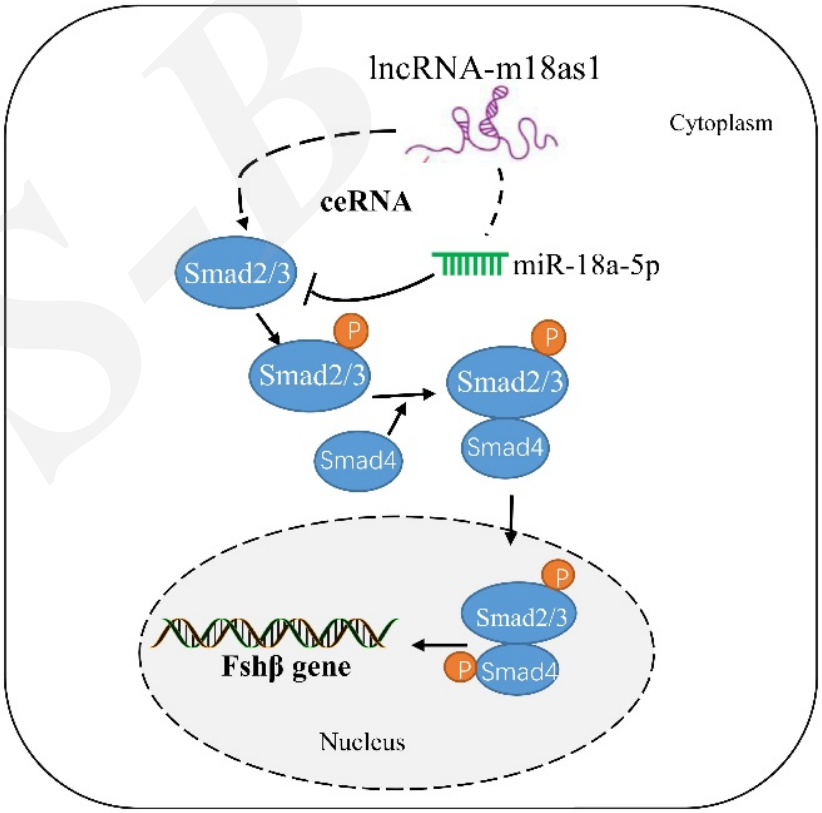


Figure 4