

Table S1 Primer sequences for qRT-PCR. The original sequence was acquired from the *G. rarus* transcriptome database compiled in the present study. Primers were designed based on the original sequence. *soat2* (sterol O-acyltransferase 2-like isoform X1, steroid biosynthesis and lipid metabolism), *inhbb* (inhibin beta B chain-like, cytokine-cytokine receptor interaction), *ihhb* (indian hedgehog B protein-like isoform X1, hedgehog signaling pathway), *gatm* (glycine amidinotransferase, arginine and proline metabolism), *faxdc2* (fatty acid hydroxylase domain-containing protein 2, biosynthesis of antibiotics), *ebp* (3 β hydroxysteroid- Δ 8,7-isomerase, biosynthesis of secondary metabolites) and *cyp1a1* (cytochrome P450 1a, retinol metabolism) has been selected for qRT-PCR verification. The miRNAs' name were as follows: *miR-122-x*, *miR-574-x*, *miR-430-y*, *miR-217-x*, *lin-4-x* and *miR-7-y*.

Gene	primer 5'-3'
<i>soat2</i>	F: AAGCACCAACAACAGGCACA R: TGACCGTACTCAACTGACCAAAC
<i>inhbb</i>	F: CTCGGAGTCGTTCTCGTGG R: ACCGTCTGCGTGATGTTTCG
<i>ihhb</i>	F: AGTGGTGGTCAATGGTGTCGT R: CCAGTGCAGCAGTGAGGAATA
<i>gatm</i>	F: CTCCGACGCCTCTTATTCCA R: CGATACCGAGATTTTCAAACATT
<i>faxdc2</i>	F: ACTTCACCTCGCCTTGGG R: AACAGCACCGTCTTCGCC
<i>ebp</i>	F: CGCAACCTGTCTATTCCCAAC R: ACCTTCTCCCTCCGCTCAA
<i>cyp1a1</i>	F: TGTCGTCTATCTCGTGCGGTAT R: GGTGAAGGGAAGGAAGGAGG
<i>ef1a</i>	F: ACAAATGCGGTGGAATCG R: TCAAACCTCCAGAGAGCGATA
<i>u6</i>	GCGCGGCCTGCATTGTACACAC
<i>miR-122-x</i>	GCCGTGGAGTGTGACAATGGTGTGTTGT
<i>miR-574-x</i>	CCGGTGAGTGTGTGAGTGTGAGTGTGA
<i>miR-430-y</i>	GCCGCGTAAGTGCTATTTGTTGGGGTAG
<i>miR-217-x</i>	CCGGGTACTGCATCAGGAAGTATTGGA
<i>lin-4-x</i>	CCGCCTCCCTGAGACCCTACTTGTG
<i>miR-7-y</i>	GCCGGCCAACAAGTCATAGTCTTCCTCA