Supplementary Table S1. Primers used in RT-qPCR.a

|  |  |  |  |
| --- | --- | --- | --- |
|  | Primer  | Forward (5'‑3') | Reverse (5'‑3') |
| Target gene | GAS5 | TGCAGTGTGGCTCTGGATAG | CTAATGCCTGTGTGCCAATG |
| Reference gene | 18S | ATCCTCAGTGAGTTCTCCCG | CTTTGCCATCACTGCCATTA |
| Target gene | AKT1 | TCTTTGCCGGTATCGTGT | TGTCATCTTGGTCAGGTGGT |
|  | PIK3CB | TATTTGGACTTTGCGACAAGACT | TCGAACGTACTGGTCTGGATAG |
|  | PTEN | AAGACCATAACCCACCACA | ATTACACCAGTTCGTCCCT |
|  | MMP9 | GCACCACCACAACATCAC | ACCACAACTCGTCATCGTC |
|  | TP53 | CCTCCTCAGCATCTTATCC | ACAAACACGCACCTCAAA |
| Reference gene | GAPDH | TGACTTCAACAGCGACACCCA | CACCCTGTTGCTGTAGCCAAA |

a The primers sequences of miR-21 and U6 were only offered by catalog number(Cat. No.). (Ribobio, Guangzhou, China)

U6: reverse transcription primer Cat. No.: SSD904071008; upstream primer Cat. No.: SSD0904071006; downstream primer Cat. No.: SSD0904071007.

miR-21: reverse transcription primer Cat. No.: SSD809230239; upstream primer Cat. No.: SSD809230931; downstream primer Cat. No.: SSD089261711.

Supplementary Table S2. The expression of GAS5 in placental tissue correlated with clinical parameters a

|  |  |
| --- | --- |
| indicators | Pearson correlation(r values) |
| TT | 0.73\*\*\* |
| Albumin | -0.61\*\*\* |
| Serum total protein | -0.57\*\*\* |
| Fibrinogen | -0.55\*\*\* |
| Blood urea nitrogen | 0.48\*\*\* |
| proteinuria | 0.45\*\*\* |
| Platelet | -0.44\*\*\* |
| fT3 | -0.33\*\* |
| Creatinine | 0.29\* |
| Albumin/Globulin | -0.28\* |
| fT4 | -0.24\* |
| PT | -0.23\* |

a r≤0.3, the correlation was not significant; 0.3 < r≤0.8, there was a direct correlation; R > 0.8, strongly significant correlation.

\*P < .05, \*\* P < .01, \*\*\* P < .001

Supplementary Table S3. OD490 Values of MTT Assay

|  |  |
| --- | --- |
|  | HTR-8/SVneo cell line (n=3) |
| time(day) | NCKD(GAS5) | KD(GAS5) | NCOE(GAS5) | OE(GAS5) |
| 1 | 0.168 ± 0.002 | 0.167 ± 0.003 | 0.169 ± 0.002 | 0.161 ± 0.004 |
| 2 | 0.196 ± 0.002 | 0.225 ± 0.002 | 0.209 ± 0.001 | 0.226 ± 0.005 |
| 3 | 0.258 ± 0.001  | 0.382 ± 0.046 | 0.272 ± 0.007 | 0.231 ± 0.002 |
| 4 | 0.368 ± 0.006  | 0.386 ± 0.045 | 0.379 ± 0.003 | 0.246 ± 0.002 |
| 5 | 0.462 ± 0.004 | 0.378 ± 0.046 | 0.478 ± 0.005 | 0.235 ± 0.002 |
|  | JEG-3 cell line (n=3) |
| time(day) | NCKD(GAS5) | KD(GAS5) | NCOE(GAS5) | OE(GAS5) |
| 1 | 0.139 ± 0.002 | 0.141 ± 0.002 | 0.140 ± 0.004 | 0.147 ± 0.001 |
| 2 | 0.196 ± 0.001 | 0.224 ± 0.001 | 0.209 ± 0.001 | 0.198 ± 0.003 |
| 3 | 0.275 ± 0.004 | 0.367 ± 0.004 | 0.285± 0.004  | 0.271 ± 0.004 |
| 4 | 0.458 ± 0.003 | 0.630 ± 0.009 | 0.507 ± 0.003 | 0.463 ± 0.031 |
| 5 | 0.678 ± 0.009 | 0.862 ± 0.006 | 0.676 ± 0.005 | 0.644 ± 0.014  |