## Supplementary Figure Legends

Figure S1. M2 macrophages were decreased in RSA patients.
The proportion of CD14 ${ }^{+} \mathrm{CD} 206^{+}$(M2 macrophages) in decidua tissues of $\mathrm{NP}(\mathrm{n}=30)$


Figure S2. Expression of 9 predicted miRNAs in decidua tissues.
(A-I) qRT-PCR analysis for expression of miR-23a-3p, miR-23b-3p, miR-20a-5p, miR-20b-5p, miR-106b-5p, miR-17-3p, miR-18a-5p, miR-93-5p and miR-378b in decidua tissues of NP $(\mathrm{n}=30)$ and RSA case $(\mathrm{n}=30)$. Values were listed as the mean $\pm$ SEM. $* P<0.05, * * P<0.01, * * * P<0.001$, ns means no statistical difference.

Figure S3. Expression of miR-103 in RAW264.7 and PM cells transfected with miR-103 mimics or miR-103 inhibitor.
(A-B) Expression of miR-103 in RAW264.7 transfected with miR-103 mimics/NC or miR-103 inhibitor/INC for 24 h . (C-D) Expression of miR-103 in PM cells transfected with miR-103 mimics/NC or miR-103 inhibitor/INC for 24 h . Values were listed as the mean $\pm$ SEM. ${ }^{* *} P<0.01$, *** $P<0.001$, ${ }^{* * * * ~} P<0.0001$.

Figure S4. miR-103 had no effect on IRF5 and IRF8 expression.
RAW264.7 cells were transfected with miR-103 mimics/NC or miR-103 inhibitor/INC, after 24 h , the cells were stimulated with LPS/IFN $\gamma$ for 24 h . (A) The mRNA level of IRF5 and IRF8 were detected in RAW264.7 transfected with miR-103 mimics/NC by qRT-PCR. (B) The protein level of IRF5 and IRF8 were detected in RAW264.7 transfected with miR-103 mimics/NC. (C) The mRNA level of IRF5 and IRF8 were detected in RAW264.7 transfected with miR-103 inhibitor/INC by qRT-PCR. (D) The protein level of STAT1 and IRF1 were measured in RAW264.7 transfected with miR-103 inhibitor/INC by western blot. Values were listed as the mean $\pm$ SEM. ${ }^{*} P<0.05$, ${ }^{* *} P<0.01$, ns means no statistical difference.

Figure S1


Figure S2
A

B

C

D

E

F

G

H
I


Figure S3
A
RAW264.7

B
RAW264.7

C
PM

D


Figure S4


## Supplementary Tables

Table S1. miRNAs sequences.

| miRNAs | Sequences (5'-3') |
| :--- | :--- |
| NC | Sense: UUCUCCGAACGUGUCACGUTT |
|  | Antisense: ACGUGACACGUUCGGAGAAGAATT |
| miR-103 mimics | Sense: AGCAGCAUUGUACAGGGCUCUAUGA |
| INC | Antisense: AUAGCCCUGUACAAUGCUGCUUU |
| miR-103 inhibitor | CAGUACUUUUGUGUAGUACAA |

Abbreviations: NC, negative control; INC, inhibitor NC.

Table S2. List of primers used in the study.

| Gene | Forward primer (5'- 3') | Reverse primer (5'-3') |
| :---: | :---: | :---: |
| Mus musculus |  |  |
| CCL2 | TACAAGAGGATCACCAGCAGC | CATTCCTTCTTGGGGTCAGCA |
| CCL5 | TGCCCACGTCAAGGAGTATT | GCGGTTCCTTCGAGTGACA |
| CXCL9 | CCGAGGCACGATCCACTACA | CCGGATCTAGGCAGGTTTGA |
| CXCL10 | GATGACGGGCCAGTGAGAAT | ATCTCAACACGTGGGCAGG |
| IL6 | GGATACCACTCCCAACAGACC | TTCTGCAAGTGCATCATCGT |
| IL12b | TGGAATGGCGTCTCTGTCTG | GCTTCCAACGCCAGTTCAAT |
| iNOS | AGCCAAGCCCTCACCTACTT | TCTGCCTATCCGTCTCGTCC |
| TNF- $\alpha$ | ACGGCATGGATCTCAAAGAC | AGATAGCAAATCGGCTGACG |
| STATI | GTTCCGACACCTGCAACTGAA | AGAGGTGGTCTGAAAGGGAAC |
| IRF1 | AAAGTCCAAGTCCAGCCGAG | GTCCGGGCTAACATCTCCAC |
| IRF5 | ATGTTGCCTTTGACGGACCT | TGCTTGTCACTGGGGATGTC |
| IRF8 | TTCTGGTGCAGGTAGAGCAG | AAGGGTCTCTGGTGTGAGGT |
| ACTB | TCCTTCTTGGGTATGGAATCCTG | TGCTAGGAGCCAGAGCAGTA |
| Homo sapiens |  |  |
| STATI | TAATCAGGCTCAGTCGGGGA | CCACACCATTGGTCTCGTGT |
| ACTB | GGGAAATCGTGCGTGACATT | GGAACCGCTCATTGCCAAT |
| miRNAs |  |  |
| miR-103 | CAGATAGCAGCATTGTACAGGG | TATCGTTGTACTCCAGACCAAGAC |
| miR-23a-3p | GAAGTCTATCACATTGCCAGGG | TATGGTTGTTCTCGTCTCTGTGTC |
| miR-23b-3p | TGGGTTCCTGGCATGCTGATTT | GTCGTATCCAGTGCGTGTCGTG |
| miR-20a-5p | GCCCGCTAAAGTGCTTATAGTG | GCTGTCAACGATACGCTACGT |
| miR-20b-5p | CAAAGTGATCATAGTGCAGGTA | GGGACCTTGGTTAGGTGCAC |
| miR-106b-5p | TGCGGCAACACCAGTCGATGG | CCAGTGCAGGGTCCGAGGT |
| miR-17-3p | CTCAACTGGTGTCGTGGA | ACTTGTAGCTCAACT |
| miR-18a-5p | ACGTAAGGTGCATCTAGTGVAGAT | GTGCAGGGTCCGAGGT |
| miR-93-5p | GCCATGTAAACATCTCGGACTG | CAATGCGTGTGGTGGAGGAG |
| miR-378b | GGTCATTGAGTCTTCAAGG | GGTCTTTCTGCCTCCA |
| U6 | ATTGGAACGATACAGAGAAGATT | GGAACGCTTCACGAATTTG |

Abbreviations: CCL2, C-C motif chemokine ligand 2; CCL5, C-C motif chemokine ligand 5; CXCL9, C-X-C motif chemokine ligand 9; CXCL10, C-X-C motif chemokine ligand 10; IL6, interleukin 6; ILI2b, interleukin 12b; iNOS, inducible NO synthase; TNF- $\alpha$, tumor necrosis factor- $\alpha$; STAT1, signal transducer and activator of transcription 1; IRF1, interferon regulatory factor 1; IRF5, interferon regulatory factor 5; IRF8, interferon regulatory factor 8 ; $A C T B$, beta-actin.

Table S3. Differentially expressed miRNAs in RAW264.7-derived M1 macrophage microarray.

| miRNA | $P$ value | Fold change | Regulation |
| :---: | :---: | :---: | :---: |
| miR-21a-3p | 4.14E-05 | 105.6048 | up |
| miR-146b-5p | 0.015174 | 17.5164 | up |
| miR-7011-3p | 0.037886 | 13.36382 | up |
| miR-5121 | 0.039008 | 8.273133 | up |
| miR-125a-5p | $8.69 \mathrm{E}-05$ | 7.953795 | up |
| miR-22-3p | $2.08 \mathrm{E}-04$ | 7.754936 | up |
| miR-99b-5p | 0.014278 | 6.597976 | up |
| miR-146a-5p | $1.81 \mathrm{E}-05$ | 3.953452 | up |
| let-7e-5p | $2.20 \mathrm{E}-05$ | 3.264867 | up |
| miR-210-3p | 0.019694 | 2.911234 | up |
| miR-222-3p | 0.001151 | 2.792338 | up |
| miR-6931-5p | 0.002041 | 2.543805 | up |
| miR-466h-3p | 0.027037 | 2.390977 | up |
| miR-29a-3p | 0.001455 | 2.308446 | up |
| miR-1224-5p | 7.54E-04 | 2.281455 | up |
| miR-8110 | 0.003366 | 2.200346 | up |
| miR-466f-3p | 0.044144 | 2.173257 | up |
| miR-6769b-5p | 0.018995 | 2.131759 | up |
| miR-466q | 0.044854 | 2.117526 | up |
| miR-574-5p | 0.016038 | 2.097379 | up |
| miR-1897-5p | 0.001047 | 2.082543 | up |
| miR-378a-3p | 0.007884 | 33.20296 | down |
| miR-378b-3p | 0.007699 | 23.11563 | down |
| miR-301a-3p | 0.045478 | 18.83452 | down |
| miR-20b-5p | $9.00 \mathrm{E}-04$ | 5.628574 | down |
| miR-93-5p | $2.48 \mathrm{E}-04$ | 4.998238 | down |
| miR-20a-5p | 7.72E-07 | 4.912466 | down |
| miR-18a-5p | 0.002095 | 4.820261 | down |
| miR-425-5p | 0.005142 | 4.343293 | down |
| miR-92a-3p | $9.28 \mathrm{E}-06$ | 3.848692 | down |
| miR-15b-5p | $2.92 \mathrm{E}-05$ | 3.842767 | down |
| miR-27b-3p | $1.55 \mathrm{E}-04$ | 3.763017 | down |
| miR-30c-5p | $1.45 \mathrm{E}-05$ | 3.697379 | down |
| miR-25-3p | $1.41 \mathrm{E}-04$ | 3.488334 | down |
| miR-19a-3p | 0.001285 | 3.295047 | down |
| miR-484 | 0.003361 | 3.174037 | down |
| miR-423-5p | $3.08 \mathrm{E}-04$ | 3.08423 | down |
| miR-19b-3p | $7.69 \mathrm{E}-04$ | 3.03592 | down |
| miR-193a-3p | 0.013033 | 3.020537 | down |
| miR-106b-5p | 0.006581 | 2.939195 | down |
| miR-17-3p | $9.08 \mathrm{E}-04$ | 2.891409 | down |
| miR-103-3p | 0.014943 | 2.888302 | down |
| miR-130b-3p | 0.002611 | 2.811731 | down |
| miR-223-3p | 0.002205 | 2.637563 | down |
| miR-27a-3p | 0.001053 | 2.633079 | down |
| miR-30a-5p | 0.004397 | 2.6166 | down |


| let-7c-5p | 0.002998 | 2.487104 | down |
| :--- | :---: | :---: | :--- |
| miR-1904 | $1.06 \mathrm{E}-04$ | 2.450692 | down |
| miR-23b-3p | 0.00381 | 2.333629 | down |
| miR-99a-5p | 0.001088 | 2.312916 | down |
| miR-23a-3p | $7.36 \mathrm{E}-05$ | 2.099742 | down |

