**Supplementary Material**

**Supplementary Table 1.**

**S-Table1: All Abbreviations in the study.**

|  |  |
| --- | --- |
| **Abbr.** | **Full name** |
| miRNA | microRNA |
| UTR | Untranslated region |
| LPS | lipopolysaccharide |
| LGR4/Gpr48 | Leucine-Rich Repeat Containing G Protein-Coupled Receptor 4 |
| BEND | Bovine endometrial epithelial cell line |
| NF-κB | Nuclear factor-κ-gene binding |
| IL-1β | Interleukin-1β |
| IL-6 | Interleukin-6 |
| TNF-α | Tumor necrosis factor alpha |
| FBS | Fetal bovine serum |
| qRT-PCR | Quantitative real-time polymerase chain reaction |
| H&E | Hematoxylin and eosin |
| IHC | Immunohistochemistry |
| IF | Immunofluorescene |
| CCK-8 | Cell counting kit-8 |
| TLR2/4 | Toll-like receptor 2/4 |

**Supplementary Table 2.**

**S-Table2: Primers for miR-34a and LGR4 siRNA.**

|  |  |  |
| --- | --- | --- |
| **Gene name** | **Primer sequence (5’-3’)** | **Accession number** |
| miR-34a | RT:CTCAACTGGTGTCGTGGAGTCGGCAATTCAGTTGAGACAACCAG | **MI0005464** |
|  | F: CGCGTGGCAGTGTCTTAGCT | [**MIMAT0004340**](http://www.mirbase.org/cgi-bin/mature.pl?mature_acc=MIMAT0004340) |
|  | R: AGTGCAGGGTCCGAGGTATT |
| U6 | RT:CGAGCACAGAATCGCTTCACGAATTTGCGTGTCAT | [**NM\_001075477.2**](https://www.ncbi.nlm.nih.gov/nuccore/NM_001075477.2) |
|  | F: CGAGCACAGAATCGCTTCA |
|  | R: CTCGCTTCGGCAGCACATAT |
| mimic | F: TAAGCATGTGGCTTGGCTCA | [**NM\_001205511.1**](https://www.ncbi.nlm.nih.gov/nuccore/NM_001205511.1) |
|  | R: AGCAGTCACACACAGTCAGG |
| mimic NC | F: GGTGTGTGACGTTCCCATTA | [**NM\_174093.1**](https://www.ncbi.nlm.nih.gov/nuccore/NM_174093.1) |
|  | R: ATTGAGGTGGAGAGCTTTCAG |
| inhibitor | F: TCCATCCAGTTGCCTTCT | [**NM\_173923.2**](https://www.ncbi.nlm.nih.gov/nuccore/NM_173923.2) |
|  | R: TAAGCCTCCGACTTGTGA |
| inhibitor NC | F: GTGGAACTGGCAGAAGAG | [**NM\_173966.3**](https://www.ncbi.nlm.nih.gov/nuccore/NM_173966.3) |
|  | R: TAAGCCTCCGACTTGTGA |
| Si-LGR4 | F: CCACUGCCAUAUUAGUUGUTT | [**NM\_001205511.1**](https://www.ncbi.nlm.nih.gov/nuccore/NM_001205511.1) |
|  | R: ACAACUAAUAUGGCAGUGGTT |
| antagomir | F: ACAACCAGCUAAGACACUGCCA | [**MIMAT0000542**](http://www.mirbase.org/cgi-bin/mature.pl?mature_acc=MIMAT0000542) |
| antagomir NC | R: CAGUACUUUUGUGUAGUACAA |

**Supplementary Table 3.**

**S-Table3: Primers used for qRT-PCR.**

|  |  |  |
| --- | --- | --- |
| **Gene name** | **Primer sequence (5’-3’)** | **Accession number** |
| bta-LGR4 | F: TAAGCATGTGGCTTGGCTCA | [**NM\_001205511.1**](https://www.ncbi.nlm.nih.gov/nuccore/NM_001205511.1) |
|  | R: AGCAGTCACACACAGTCAGG |
| bta-IL-1β | F: GGTGTGTGACGTTCCCATTA | [**NM\_174093.1**](https://www.ncbi.nlm.nih.gov/nuccore/NM_174093.1) |
|  | R: ATTGAGGTGGAGAGCTTTCAG |
| bta-IL-6 | F: TCCATCCAGTTGCCTTCT | [**NM\_173923.2**](https://www.ncbi.nlm.nih.gov/nuccore/NM_173923.2) |
|  | R: TAAGCCTCCGACTTGTGA |
| bta-TNF-α | F: GTGGAACTGGCAGAAGAG | [**NM\_173966.3**](https://www.ncbi.nlm.nih.gov/nuccore/NM_173966.3) |
|  | R: TAAGCCTCCGACTTGTGA |
| bta-GAPDH | F: GGTTGTCTCCTGCGACTTCA | [**NM\_001034034.2**](https://www.ncbi.nlm.nih.gov/nuccore/NM_001034034.2) |
|  | R: GGTGGTCCAGGGTTTCTTACT |
| mmu-LGR4 | F: AGGGTGTTTGTGAGAGCTGGG | [**XM\_036157249.1**](https://www.ncbi.nlm.nih.gov/nuccore/XM_036157249.1) |
|  | R: GGTCGTTACCAGCCAGTTGTA |
| mmu-IL-1β | F: GGTGTGTGACGTTCCCATTA | [**XM\_006498795.5**](https://www.ncbi.nlm.nih.gov/nuccore/XM_006498795.5) |
|  | R: ATTGAGGTGGAGAGCTTTCAG |
| mmu-IL-6 | F: TCCATCCAGTTGCCTTCT | [**NM\_001314054.1**](https://www.ncbi.nlm.nih.gov/nuccore/NM_001314054.1) |
|  | R: TAAGCCTCCGACTTGTGA |
| mmu-TNF-α | F: GTGGAACTGGCAGAAGAG | [**NM\_001278601.1**](https://www.ncbi.nlm.nih.gov/nuccore/NM_001278601.1) |
|  | R: TAAGCCTCCGACTTGTGA |
| mmu-GAPDH | F: CAGGTTGTCTCCTGCGACTT | [**NM\_001289726.1**](https://www.ncbi.nlm.nih.gov/nuccore/NM_001289726.1) |
|  | R: TATGGGGGTCTGGGATGGAA |