**SUPPORTING INFORMATION**

**Materials and methods S1**

*Hormonal synchronization protocol*

On day −15, PGF2α (25 mg, IM, Lutalyse, Zoetis) was administered. On day −1, heifers received a progesterone-releasing intravaginal device (1 g of P4 CIDR, Zoetis) and 2 mg i.m. of estradiol benzoate (Gonadiol, Zoetis) and 25 mg i.m. of PGF2α, (Lutalyse, Zoetis).

*Analysis of gene expression*

Total RNA extraction was performed using TRIzol reagent (Sigma Aldrich) associated with a purification kit (RNeasy Mini Kit, Qiagen), according to the manufacturer’s recommendations. The RNA concentration was measured in a spectrophotometer (NanoDrop Lite, Thermo Fisher Scientific Inc.), and purity was verified through the A260/A280 ratio. Reverse transcription was performed using the iScript Synthesis kit (BioRad).

Real-time PCR was performed in duplicate, using the GoTaq qPCR Master Mix (Promega) in a Real-Time ECO PCR system (Illumina). For each assay, 45 cycles (95ºC for 15 s and 60ºC for 1 min) were run and a dissociation curve was included at the end of reaction to detect the specificity by the amplification of a single PCR product. The coefficient of variation was less than 5% for all the pairs of primers used.

Relative expression was calculated using the equation 2A − B/2C − D, as described by Campos *et al.* (2017), using as internal control the geometric mean of the expression of the *RN18S1* and *GAPDH* genes in the oviduct and uterus. The stability of the control genes was checked using GeNorm software analysis (Vandesompele *et al.*, 2002).

**Table S1** Target transcript primers sequences and associated gene accession numbers

|  |  |  |
| --- | --- | --- |
| Gene | Accession number | Primer pairs (5′→3′) |
| *BSG* | NM\_001075371.2 | F: CGCACCGATCTGGAAGTGAA |
|  |  | R: AGGATCACAGTCTCCCCCTC |
| *CASP3* | NM\_001077840.1 | F: TGCAGAAGTCTGACTGGAAAACCCAAAC |
|  |  | R: TCATCCTCAGCACCACTGTCTGTCTC |
| *GAPDH* | NM\_001034034.2 | F: GATTGTCAGCAATGCCTCCT |
|  |  | R: GGTCATAAGTCCCTCCACGA |
| *GPX4* | NM\_001039847.3 | F: ATACGCCGAGTGTGGTTTAC |
|  |  | R: CCAGCGGCGAACTCTTT |
| *HSPA1A* | NM\_203322.3 | F: GGGGAGGACTTCGACAACAG |
|  |  | R: GAAGTCGATGCCCTCGAACA |
| *IGF2* | NM\_001367627.1 | F: ACCCTCCAGTTTGTCTGTGG |
|  |  | R: ACACATCCCTCTCGGACTTG |
| *IL10* | NM\_174088.1 | F: TGCCAAGCCTTGTCGGAAAT |
|  |  | R: CTTGTTTTCGCAGGGCAGAA |
| *IL1β* | NM\_174093.1 | F: GAGAGGGTTTCCATTCTGAAGT |
|  |  | R: CATCAGCACTTCTCAAATCGAAGA |
| *MMP19* | NM\_001075983.1 | F: TGGACGTTATCCCCTCAGTC |
|  |  | R: GTCCATGGTTCATGCTTGTG |
| *NANOG* | NM\_001025344.1 | F: AGTCCCAAACAAAAGCTCTCAAGT |
|  |  | R: AGAACACAGTCCGCATCTTCTG |
| *OVGP1* | NM\_001080216.1 | F: AAGAATGAGGCCCAGCTCAC |
|  |  | R: TGCCGAAGATTTGGGGTCTC |
| *PTGS2* | NM\_174445.2 | F: TTTGACCCAGAGCTGCTTTT |
|  |  | R: GAAAGACGTCAGGCAGAAGG |
| *RN18S1* | NR\_036642.1 | F: CCTTCCGCGAGGATCCATTG |
|  |  | R: CGCTCCCAAGATCCAACTAC |
| *SELL* | NM\_174182.1 | F: ACAGCCCTCTGCTACACAGCTTC |
|  |  | R: GGGGCCTCCAAAGGCACACA |
| *TLR4* | NM\_174198.6 | F: CTTGCGTACAGGTTGTTCCTAA |
|  |  | R: CTGGGAAGCTGGAGAAGTTATG |
| *TNF* | NM\_173966.3 | F: CCACGTTGTAGCCGACATCA |
|  |  | R: ATGAGGTAAAGCCCGTCAGC |

**References S1**

**de Campos FT, Rincón JAA, Acosta DAV, Silveira PAS, Pradieé J, Corrêa MN, Gasperin BG, Pfeifer LFM, Barros CC, Pegoraro LMC and Schneider A** (2017). The acute effect of intravenous lipopolysaccharide injection on serum and intrafollicular HDL components and gene expression in granulosa cells of the bovine dominant follicle. *Theriogenology* **89**, 244–9.

**Vandesompele J, De Preter K, Pattyn F, Poppe B, Van Roy N, De Paepe A and Speleman F** (2002). Accurate normalization of real-time quantitative RT-PCR data by geometric averaging of multiple internal control genes. *Genome Biol* **3**, RESEARCH0034.