

Description of Additional Supplementary Files

File name: Supplementary Data 1

Description: **1a** | Normalized label-free quantification (LFQ) intensities of IFNT peptides in conditioned media. **1b** | Sum of LFQ intensities AA (log2).

File name: Supplementary Data 2

Description: **2a** | Log2 label-free quantification (LFQ) intensities of all peptides detected in IFNT-KO and wild-type (WT) conceptuses. IFNT peptides were exclusively identified in WT samples and were completely absent in all IFNT-KO conceptuses. **2b** | Results of volcano plot analysis of IFNT-KO vs. wild-type (WT) conceptuses.

File name: Supplementary Data 3

Description: Normalized label-free quantification (LFQ) intensities for each IFNT-specific peptide in IFNT-KO and wild-type (WT) conceptuses. IFNT peptides were exclusively identified in WT samples and were completely absent in all IFNT-KO conceptuses.

File name: Supplementary Data 4

Description: **4a** | RNA-seq read counts for IFNT-KO and WT conceptuses. **4b** | Statistics for differential gene expression between IFNT KO and WT concepti as obtained with the R package edgeR (v4.8.2).

File name: Supplementary Data 5

Description: Log2 label-free quantification (LFQ) intensities for the prostaglandin E synthases PTGES, PTGES2, and PTGES3 proteins (top) and normalized mRNA counts (bottom) in *IFNT*-KO and wild-type (WT) conceptuses. No significant differences were observed between groups for any isoform (two-tailed Student's t-test).

File name: Supplementary Data 6

Description: **6a** | Log2 label-free quantification (LFQ) intensities of all peptides detected in endometrium samples exposed to *IFNT*-KO vs. WT conceptuses. **6b** | Results of volcano plot analysis of endometrium samples exposed to *IFNT*-KO vs. WT conceptuses.

File name: Supplementary Data 7

Description: Results of STRING functional enrichment analysis using the Reactome database.

File name: Supplementary Video 1

Description: **Transrectal ultrasonography of recipients following transfer of two *IFNT*-KO embryos.** Transrectal ultrasonography on day 40 of gestation confirmed twin pregnancies in three recipient heifers (67927, 67941, 67942) following transfer of two *IFNT*-KO blastocysts.

File name: Supplementary Video 2

Description: Transrectal ultrasonography of a recipient following transfer of a single *IFNT-KO* embryo. Transrectal ultrasonography on day 46 of gestation confirmed an ongoing pregnancy in a recipient heifer following transfer of a single *IFNT-KO* blastocyst.